

PORSF 11.3.17.1 1/3  
6/20/08

Doc No. 37

USEPA SF



1363985

## ITEM: 5YK70 - Degreaser 20 Oz

PICK REQ: 1054597818

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: B0895

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - B0895

Associated Grainger Item: 5YK70 - Degreaser 20 Oz

CRC

MATERIAL SAFETY DATA SHEET

## SECTION 1: PRODUCT &amp; COMPANY IDENTIFICATION

PRODUCT NAME: CHLOR-FREE(R\*) NON-CHLORINATED DEGREASER (AEROSOL)

PRODUCT NUMBER (S): 03185, 83185

MANUFACTURED BY:  
CRC INDUSTRIES, INC.  
885 LOUIS DRIVE  
WARMINSTER, PA 18974

WWW.CRCINDUSTRIES.COM

GENERAL INFORMATION: (215) 674-4300

TECHNICAL ASSISTANCE: (800) 521-3168

CUSTOMER SERVICE: (800) 272-4620

24-HR EMERGENCY (CHEMTREC): (800) 424-9300

## SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE &amp; ODOR: CLEAR, WATER-WHITE LIQUID, MILD SOLVENT ODOR

DANGER:

EXTREMELY FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. CONTENTS UNDER PRESSURE.

AS DEFINED BY OSHA'S HAZARD COMMUNICATION STANDARD, THIS PRODUCT IS HAZARDOUS.

POTENTIAL HEALTH EFFECTS:

EYE:

MAY CAUSE MILD EYE IRRITATION. SYMPTOMS INCLUDE STINGING, TEARING AND REDNESS.

MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN. SYMPTOMS INCLUDE REDNESS, BURNING, AND DRYING AND CRACKING OF SKIN, BURNS AND OTHER SKIN DAMAGE. PASSAGE OF THIS MATERIAL THROUGH THE SKIN IS POSSIBLE, BUT IT IS UNLIKELY TO RESULT IN HARMFUL EFFECTS DURING SAFE HANDLING AND USE.

INHALATION:

BREATHING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS USUALLY INCLUDE NOSE AND THROAT IRRITATION AND CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, NAUSEA, HEADACHE, UNCONSCIOUSNESS).

INGESTION:

SWALLOWING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. SWALLOWING LARGE AMOUNTS MAY BE HARMFUL. THIS MATERIAL CAN GET INTO THE LUNGS DURING SWALLOWING OR VOMITING AND CAN RESULT IN LUNG INFLAMMATION AND OTHER LUNG INJURY.

CHRONIC EFFECTS: NONE KNOWN

TARGET ORGANS: LIVER, KIDNEY

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

PRE-EXISTING SKIN CONDITIONS, LUNG CONDITIONS

SEE SECTION 11 FOR TOXICOLOGY AND CARCINOGENICITY INFORMATION ON PRODUCT INGREDIENTS.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	% BY WT.
CYCLOHEXANE	110-82-7	70 - 80
ETHANOL	64-17-5	8 - 13
HEXANE ISOMERS	VARIOUS	5 - 10
METHANOL	67-56-1	<4
n-HEXANE	110-54-3	<1
CARBON DIOXIDE	124-38-9	2 - 6

## SECTION 4: FIRST AID MEASURES

CONTACT:  
IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. CALL A PHYSICIAN IF IRRITATION PERSISTS.SKIN CONTACT:  
REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA WITH SOAP AND WATER. CALL A PHYSICIAN IF IRRITATION PERSISTS. WASH CONTAMINATED CLOTHING PRIOR TO RE-USE.

INHALATION:

REMOVE PERSON TO FRESH AIR. KEEP PERSON CALM. IF NOT BREATHING, GIVE

ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN.

INGESTION:

SEEK MEDICAL ATTENTION. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE INDIVIDUAL ON THE LEFT SIDE WITH THE HEAD DOWN

NOTE TO PHYSICIANS:

THIS MATERIAL IS AN ASPIRATION HAZARD. POTENTIAL DANGER FROM ASPIRATION MUST BE WEIGHED AGAINST POSSIBLE ORAL TOXICITY WHEN DECIDING WHETHER TO INDUCE VOMITING

## SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES:

THIS PRODUCT IS EXTREMELY FLAMMABLE IN ACCORDANCE WITH AEROSOL FLAMMABILITY DEFINITIONS (16 CFR 1500.3(C)(6)).

FLASH POINT: &lt;0 F (TCC)

AUTOIGNITION TEMPERATURE: 500 F

UPPER EXPLOSIVE LIMIT: 8.3  
LOWER EXPLOSIVE LIMIT: 1.3

SUITABLE EXTINGUISHING MEDIA:

CLASS B FIRE EXTINGUISHERS, CARBON DIOXIDE, DRY CHEMICAL, REGULAR FOAM

PRODUCTS OF COMBUSTION: OXIDES OF CARBON, VARIOUS HYDROCARBONS

PROTECTION OF FIRE-FIGHTERS:

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED, NIOSH-APPROVED BREATHING APPARATUS FOR PROTECTION AGAINST SUFFOCATION AND POSSIBLE TOXIC DECOMPOSITION PRODUCTS. PROPER EYE AND SKIN PROTECTION SHOULD BE PROVIDED. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL AND TO KNOCK DOWN VAPORS WHICH MAY RESULT FROM PRODUCT DECOMPOSITION.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8.

ENVIRONMENTAL PRECAUTIONS:

TAKE PRECAUTIONS TO PREVENT CONTAMINATION OF GROUND AND SURFACE WATERS. DO NOT FLUSH INTO SEWERS OR STORM DRAINS.

METHODS FOR CONTAINMENT &amp; CLEAN-UP:

REMOVE SOURCES OF IGNITION. DIKE AREA TO CONTAIN SPILL. VENTILATE THE AREA WITH FRESH AIR. IF IN CONFINED SPACE OR LIMITED AIR CIRCULATION AREA, CLEAN-UP WORKERS SHOULD WEAR APPROPRIATE RESPIRATORY PROTECTION. RECOVER OR ABSORB SPILLED MATERIAL USING AN ABSORBENT DESIGNED FOR CHEMICAL SPILLS. PLACE USED ABSORBENTS INTO PROPER WASTE CONTAINERS.

## SECTION 7: HANDLING AND STORAGE

HANDLING PROCEDURES:

DO NOT USE NEAR SOURCES OF IGNITION INCLUDING STATIC IGNITION HAZARDS. USE WITH PROPER VENTILATION. WASH HANDS AFTER USE AND BEFORE CONTACTING FOOD.

STORAGE PROCEDURES:

STORE IN A COOL DRY AREA OUT OF DIRECT SUNLIGHT. AEROSOL CANS MUST BE MAINTAINED BELOW 120 F TO PREVENT CANS FROM RUPTURING.

AEROSOL STORAGE LEVEL: III

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
CYCLOHEXANE	300	NE	100	NE	NE		PPM
ETHANOL	1000	NE	1000	NE	NE	PPM	
HEXANE ISOMERS	500	1000 (V)	500	1000	NE		PPM
METHANOL	200	NE	200 (S)	250 (S)	NE	PPM	
n-HEXANE	500	NE	50 (S)	NE	NE	PPM	
CARBON DIOXIDE	5000	30000 (V)	5000	30,000	NE		PPM

N.E. - NOT ESTABLISHED

(C) - CEILING

(S) - SKIN

(V) - VACATED

ENGINEERING CONTROLS:

AREA SHOULD HAVE VENTILATION TO PROVIDE FRESH AIR. LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE EMISSIONS OF THE CONTAMINANT AT THE SOURCE, PREVENTING DISPERSION INTO THE GENERAL WORK AREA. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN VAPOR LEVELS BELOW THE EXPOSURE GUIDELINES. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

RESPIRATORY PROTECTION:

NONE REQUIRED FOR NORMAL WORK WHERE ADEQUATE VENTILATION IS PROVIDED. IF ENGINEERING CONTROLS ARE NOT FEASIBLE OR IF EXPOSURE EXCEEDS THE APPLICABLE EXPOSURE LIMITS, USE A NIOSH-APPROVED CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE. USE A SELF-CONTAINED BREATHING APPARATUS IN CONFINED SPACES AND FOR EMERGENCIES.

EYE/FACE PROTECTION:

FOR NORMAL CONDITIONS, WEAR SAFETY GLASSES. WHERE THERE IS REASONABLE PROBABILITY OF LIQUID CONTACT, WEAR SPLASH-PROOF GOGGLES.

SKIN PROTECTION:  
USE PROTECTIVE GLOVES SUCH AS NATURAL RUBBER. ALSO, USE FULL PROTECTIVE CLOTHING IF THERE IS PROLONGED OR REPEATED CONTACT OF LIQUID WITH SKIN.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID

COLOR: CLEAR, WATER-WHITE

ODOR: MILD SOLVENT

SPECIFIC GRAVITY: 0.767

INITIAL BOILING POINT: 179 F

FREEZING POINT: ND

VAPOR PRESSURE: ND

VAPOR DENSITY: >1 (AIR = 1)

EVAPORATION RATE: >1 (BUTYL ACETATE = 1)

SOLUBILITY: NEGLECTIBLE IN WATER

pH: NA

VOLATILE ORGANIC COMPOUNDS:

WT %: 96

G/L: 736.3

LBS./GAL: 6.13

#### SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE

CONDITIONS TO AVOID: TEMPERATURE EXTREMES, SOURCES OF IGNITION

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON, VARIOUS HYDROCARBONS

POSSIBILITY OF HAZARDOUS REACTIONS: NO

#### SECTION 11: TOXICOLOGICAL INFORMATION

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT.

ACUTE EFFECTS:

COMPONENT	TEST	RESULT	ROUTE	SPECIES
CYCLOHEXANE	LD50	12705 MG/KG	ORAL	RAT
HEXANE	LD50	70 GM/M3/2H	INHALATION	MOUSE
HEXANE	LD50	3000 MG/KG	DERMAL	RABBIT

CHRONIC EFFECTS:

CARCINOGENICITY:

	COMPONENT	RESULT
OSHA	NONE LISTED	
IARC	NONE LISTED	
NTP	NONE LISTED	
OTHER	NONE	

#### SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT.

ECOTOXICITY:

n-HEXANE:  
48 HR EC50 WATER FLEA: 3.87 MG/L  
96 HR LC50 LEPOMIS MACROCHIRUS: 4.12 MG/L

PERSISTENCE / DEGRADABILITY: NO INFORMATION AVAILABLE

BIOACCUMULATION / ACCUMULATION: NO INFORMATION AVAILABLE

MOBILITY IN ENVIRONMENT: NO INFORMATION AVAILABLE

#### SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL:  
THE DISPENSED LIQUID PRODUCT IS A HAZARDOUS WASTE FOR THE CHARACTERISTIC OF IGNITABILITY (D001). (SEE 40 CFR PART 261.20 - 261.33)  
AEROSOLS SHOULD BE FULLY DEPRESSURIZED AND EMPTIED. THE LIQUID SHOULD BE CAPTURED AND MANAGED AS A HAZARDOUS WASTE. THE EMPTY CONTAINER MAY BE RECYCLED.

ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN STATE OR NATIONAL REQUIREMENTS.

#### SECTION 14: TRANSPORT INFORMATION

SHIPPER'S SHIPPING DESCRIPTION:  
U T (GROUND): CONSUMER COMMODITY, ORM-D  
S AL PROVISIONS: NONE

#### SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL:

TOXIC SUBSTANCES CONTROL ACT (TSCA):  
ALL INGREDIENTS ARE EITHER LISTED ON THE TSCA INVENTORY OR ARE EXEMPT.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):

REPORTABLE QUANTITIES (RQ'S) EXIST FOR THE FOLLOWING INGREDIENTS:  
CYCLOHEXANE (1000 LBS), METHANOL (5000 LBS)  
n-HEXANE (5000 LBS)

SPILLS OR RELEASES RESULTING IN THE LOSS OF ANY INGREDIENT AT OR ABOVE ITS RQ REQUIRE IMMEDIATE NOTIFICATION TO THE NATIONAL RESPONSE CENTER (800-424-8802) AND TO YOUR LOCAL EMERGENCY PLANNING COMMITTEE.

SUPERFUND AMENDMENTS REAUTHORIZATION ACT (SARA) TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS): NONE

SECTION 311/312 HAZARD CATEGORIES:

FIRE HAZARD: YES

REACTIVE HAZARD: NO

RELEASE OF PRESSURE: YES

ACUTE HEALTH HAZARD: YES

CHRONIC HEALTH HAZARD: NO

SECTION 313 TOXIC CHEMICALS:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:  
CYCLOHEXANE (<75%), METHANOL (<4%), n-HEXANE (<1%)

CLEAN AIR ACT:

SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS): METHANOL, n-HEXANE

STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROP 65):  
THIS PRODUCT MAY CONTAIN THE FOLLOWING CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE

STATE RIGHT TO KNOW:

NEW JERSEY: 110-82-7, 64-17-5, 37-56-1, 110-54-3, 124-38-9

PENNSYLVANIA: 110-82-7, 64-17-5, 37-56-1, 110-54-3, 124-38-9

MASSACHUSETTS: 110-82-7, 64-17-5, 37-56-1, 110-54-3, 124-38-9

RHODE ISLAND: 110-82-7, 64-17-5, 37-56-1, 110-54-3, 124-38-9

ADDITIONAL REGULATORY INFORMATION:

IN STATES WITH CONSUMER PRODUCT VOC REGULATIONS, THIS PRODUCT IS NOT FOR RETAIL SALE.

#### SECTION 16: OTHER INFORMATION

NFPA:  
HEALTH 2  
FLAMMABILITY 3  
REACTIVITY 0

HMIS:  
HEALTH 2  
FLAMMABILITY 3  
REACTIVITY 0  
PPE B

PREPARED BY: MICHELLE RUDNICK

CRC #: 463C

REVISION DATE: 04/02/2007

CHANGES SINCE LAST REVISION: FORMULA NUMBER REVISED.

THE INFORMATION CONTAINED IN THIS DOCUMENT APPLIES TO THIS SPECIFIC MATERIAL AS SUPPLIED. IT MAY NOT BE VALID FOR THIS MATERIAL IF IT IS USED IN COMBINATION WITH ANY OTHER MATERIALS. THIS INFORMATION IS ACCURATE TO THE BEST OF CRC INDUSTRIES' KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED BY CRC TO BE ACCURATE. BEFORE USING ANY PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

CAS: CHEMICAL ABSTRACT SERVICE  
PPM: PARTS PER MILLION  
TCC: TAG CLOSED CUP  
PMCC: PENSKY-MARTENS CLOSED CUP  
PPE: PERSONAL PROTECTION EQUIPMENT  
TWA: TIME WEIGHTED AVERAGE  
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS  
NIOSH: NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH  
NA: NOT APPLICABLE  
ND: NOT DETERMINED  
NE: NOT ESTABLISHED  
G/L: GRAMS PER LITER  
LBS./GAL: POUNDS PER GALLON  
STEL: SHORT TERM EXPOSURE LIMIT

ORDER: 1054597818

ITEM: 5YK70 - Degreaser 20 Oz

HAZMAT: 5YK70

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

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GRAINGER SHIPPING INFORMATION

STOCK # : 5YK70  
MSDS # : B0895  
FREIGHT CODE : 0811  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D FLASHPOINT -18 DGS C, 0  
DGS F

FLASHPOINT : -18 DEGREES CELSIUS, 0 DEGREES FAHRENHEIT

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER : ORM-D  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : Consumer Commodity ORM-D

LIMITED QUANTITY : YES  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!  
SHIPPING-PAPERS :

SLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

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## ITEM: 6KP13 - Spray Paint Gloss Banner Red 12 Oz

PICK REQ: 1054314407

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A8809

This MSDS should be attached or kept with the respective product with which it is associated.

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MATERIAL SAFETY DATA SHEET - A8809

Associated Grainger Item: 6KP13 - Spray Paint Gloss Banner Red 12 Oz

6KP19, 6KP21, 6KP22, 6KP25, 6KP27, 6KP28, 6KP29, 6YH15

MATERIAL SAFETY DATA SHEET

24 HOUR ASSISTANCE:  
1-847-367-7700  
RUST-OLEUM CORP.  
WWW.RUSTOLEUM.COM

## SECTION 1 - CHEMICAL PRODUCT / COMPANY INFORMATION

PRODUCT NAME: N INDUSTRIAL CHOICE AEROSOLS

IDENTIFICATION NUMBER:

N1622830, N1624830, N1626830, N1633830, N1638830, N1643830, N1644830,  
N1653830, N1664830, N1666830, N1671830, N1674830, N1676830, N1678830,  
N1679830, N1684830, N1686830, N1688830, N1690830, N1692830, N1696830

PRODUCT USE/CLASS: TOPCOATS/AEROSOL

SUPPLIER:

RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USA

MANUFACTURER:

RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USA

PREPARER: REGULATORY DEPARTMENT

REVISION DATE: 01/24/2006

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WEIGHT % LESS THAN
ACETONE	67-64-1	35.0
LIQUEFIED PETROLEUM GAS	68476-86-8	30.0
XYLENE	1330-20-7	20.0
TOLUENE	108-88-3	20.0
ALIPHATIC PETROLEUM DISTILLATES	64742-89-8	20.0
TITANIUM DIOXIDE	13463-67-7	15.0
NAPHTHA	8032-32-4	10.0
ETHYLBENZENE	100-41-4	10.0
AROMATIC HYDROCARBON	64742-95-6	5.0
MAGNESIUM SILICATE	14807-96-6	5.0
1,2,4-TRIMETHYLBENZENE	95-63-6	5.0
AROMATIC SOLVENT	64742-95-6	5.0
STODDARD SOLVENTS	8052-41-3	5.0
ALIPHATIC HYDROCARBON	64742-89-8	5.0
PIGMENT YELLOW 73	13515-40-7	5.0
PIGMENT BLACK 7	1333-86-4	5.0
PIGMENT YELLOW 17	4531-49-1	5.0
1,3,5-TRIMETHYLBENZENE	108-67-8	5.0
PIGMENT VIOLET 32	12225-08-0	0.1

CHEMICAL NAME	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
ACETONE	500 PPM	750 PPM	750 PPM	N.E.
LIQUEFIED PETROLEUM GAS	1000 PPM	N.E.	1000 PPM	N.E.
XYLENE	100 PPM	150 PPM	100 PPM	N.E.
TOLUENE	50 PPM	150 PPM	200 PPM	300 PPM
ALIPHATIC PETROLEUM DISTILLATES	400 PPM	N.E.	400 PPM	N.E.
TITANIUM DIOXIDE	10 MG/M3	N.E.	10 MG/M3	N.E.
NAPHTHA	300 PPM	N.E.	N.E.	N.E.
ETHYLBENZENE	100 PPM	125 PPM	100 PPM	N.E.
ALIPHATIC HYDROCARBON	N.E.	N.E.	N.E.	N.E.
MAGNESIUM SILICATE	10 MG/M3	N.E.	15 MG/M3	N.E.
1,2,4-TRIMETHYLBENZENE	25 PPM	N.E.	N.E.	N.E.

AROMATIC SOLVENT	N.E.	N.E.	N.E.	N.E.
STODDARD SOLVENTS	100 PPM	N.E.	500 PPM	N.E.
ALIPHATIC HYDROCARBON	300 PPM	N.E.	300 PPM	N.E.
PIGMENT YELLOW 73	2 MG/M3	N.E.	2 MG/M3	N.E.
PIGMENT BLACK 7	3.5 MG/M3	N.E.	3.5 MG/M3	N.E.
PIGMENT YELLOW 17	2 MG/M3	N.E.	5 MG/M3	N.E.
1,3,5-TRIMETHYLBENZENE	25 PPM	N.E.	N.E.	N.E.
PIGMENT VIOLET 32	N.E.	N.E.	N.E.	N.E.

## SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CONTENTS UNDER PRESSURE. VAPORS MAY CAUSE FLASH FIRE OR EXPLOSION. EXTREMELY  
FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR  
NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT:

PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN IRRITATION. SUBSTANCE MAY  
CAUSE SLIGHT SKIN IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION:

HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES, NOSE, THROAT AND  
LUNGS. AVOID BREATHING VAPORS OR MISTS. HIGH GAS, VAPOR, MIST OR DUST  
CONCENTRATIONS MAY BE HARMFUL IF INHALED. HARMFUL IF INHALED.

EFFECTS OF OVEREXPOSURE - INGESTION:

ASPIRATION HAZARD IF SWALLOWED; CAN ENTER LUNGS AND CAUSE DAMAGE. SUBSTANCE  
MAY BE HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:

IARC LISTS ETHYLBENZENE AS A POSSIBLE HUMAN CARCINOGEN (GROUP 2B). MAY CAUSE  
CENTRAL NERVOUS SYSTEM DISORDER (E.G., NARCOSIS INVOLVING A LOSS OF  
COORDINATION, WEAKNESS, FATIGUE, MENIAL CONFUSION, AND BLURRED VISION)  
AND/OR DAMAGE. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL  
OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.  
OVEREXPOSURE TO XYLENE IN LABORATORY ANIMALS HAS BEEN ASSOCIATED WITH LIVER  
ABNORMALITIES, KIDNEY, LUNG, SPLEEN, EYE AND BLOOD DAMAGE AS WELL AS  
REPRODUCTIVE DISORDERS. EFFECTS IN HUMANS, DUE TO CHRONIC OVEREXPOSURE, HAVE  
INCLUDED LIVER, CARDIAC ABNORMALITIES AND NERVOUS SYSTEM DAMAGE.  
OVEREXPOSURE TO TOLUENE IN LABORATORY ANIMALS HAS BEEN ASSOCIATED WITH LIVER  
ABNORMALITIES, KIDNEY, LUNG AND SPLEEN DAMAGE. EFFECTS IN HUMANS HAVE  
INCLUDED LIVER AND CARDIAC ABNORMALITIES.CONTAINS CARBON BLACK. CHRONIC INFLAMMATION, LUNG FIBROSIS, AND LUNG TUMORS  
HAVE BEEN OBSERVED IN SOME RATS EXPERIMENTALLY EXPOSED FOR LONG PERIODS OF  
TIME TO EXCESSIVE CONCENTRATIONS OF CARBON BLACK AND SEVERAL INSOLUBLE FINE  
DUST PARTICLES. TUMORS HAVE NOT BEEN OBSERVED IN OTHER ANIMAL SPECIES (I.E.,  
MOUSE AND HAMSTER) UNDER SIMILAR CIRCUMSTANCES AND STUDY CONDITIONS.  
EPIDEMIOLOGICAL STUDIES OF NORTH AMERICAN WORKERS SHOW NO EVIDENCE OF  
CLINICALLY SIGNIFICANT ADVERSE HEALTH EFFECTS DUE TO OCCUPATIONAL EXPOSURE  
TO CARBON BLACK.CARBON BLACK IS LISTED AS A GROUP 2B-"POSSIBLY CARCINOGENIC TO HUMANS" BY  
IARC AND IS PROPOSED TO BE LISTED AS A4 - "NOT CLASSIFIED AS A HUMAN  
CARCINOGEN" BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL  
HYGIENISTS. SIGNIFICANT EXPOSURE IS NOT ANTICIPATED DURING BRUSH APPLICATION  
OR DRYING. RISK OF OVEREXPOSURE DEPENDS ON DURATION AND LEVEL OF EXPOSURE TO  
DUST FROM REPEATED SANDING OF SURFACES OR SPRAY MIST AND THE ACTUAL  
CONCENTRATION OF CARBON BLACK IN THE FORMULA.

PRIMARY ROUTE(S) OF ENTRY:

SKIN CONTACT, SKIN ABSORPTION, INHALATION, EYE CONTACT

## SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT:

HOLD EYELIDS APART AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.  
GET MEDICAL ATTENTION.

FIRST AID - SKIN CONTACT:

WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR  
PERSISTS.

FIRST AID - INHALATION:

IF YOU EXPERIENCE DIFFICULTY IN BREATHING, LEAVE THE AREA TO OBTAIN FRESH  
AIR. IF CONTINUED DIFFICULTY IS EXPERIENCED, GET MEDICAL ASSISTANCE  
IMMEDIATELY.

FIRST AID - INGESTION:

ASPIRATION HAZARD:

DO NOT INDUCE VOMITTING OR GIVE ANYTHING BY MOUTH BECAUSE THIS MATERIAL CAN  
ENTER THE LUNGS AND CAUSE SEVERE LUNG DAMAGE. GET IMMEDIATE MEDICAL  
ATTENTION.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -156 F (SETAFLASH)

LOWER EXPLOSIVE LIMIT: 0.7%

UPPER EXPLOSIVE LIMIT: 12.8%

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

WATER SPRAY MAY BE INEFFECTIVE. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED  
TO EXTREME HEAT. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR. FLASH POINT IS  
LESS THAN 20 DEG. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR!  
PERFORATION OF THE PRESSURIZED CONTAINER MAY CAUSE BURSTING OF THE CAN.  
ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. VAPORS CAN

TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. KEEP CONTAINERS TIGHTLY CLOSED.

SPECIAL FIREFIGHTING PROCEDURES:  
EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

DO NOT BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:  
IF LIQUID SPILLED, CLEAN UP IMMEDIATELY. DO NOT USE COMBUSTIBLE MATERIALS SUCH AS SAWDUST. REMOVE ALL SOURCES OF IGNITION, VENTILATE AREA AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS. DISPOSE OF ACCORDING TO LOCAL, STATE (PROVINCIAL) AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

#### SECTION 7 - HANDLING AND STORAGE

HANDLING:  
WASH HANDS BEFORE EATING. WASH THOROUGHLY AFTER HANDLING. USE ONLY IN A WELL-VENTILATED AREA. AVOID BREATHING VAPOR OR MIST. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED BECAUSE IT MAY RETAIN PRODUCT RESIDUES.

STORAGE:  
DO NOT STORE ABOVE 120 DEG. F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS I FLAMMABLE LIQUIDS. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CONTENTS UNDER PRESSURE. DO NOT EXPOSE TO HEAT OR STORE ABOVE 120 DEG. F.

#### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:  
USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. USE EXPLOSION-PROOF VENTILATION EQUIPMENT. PREVENT BUILD-UP OF VAPORS BY OPENING ALL DOORS AND WINDOWS TO ACHIEVE CROSS-VENTILATION.

RESPIRATORY PROTECTION:  
A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. A NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE OR CANISTER MAY BE PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES WHERE AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS.

PROTECTION PROVIDED BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION.

SKIN PROTECTION:  
NITRILE OR NEOPRENE GLOVES MAY AFFORD ADEQUATE SKIN PROTECTION. USE IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT AND ABSORPTION OF THIS MATERIAL THROUGH THE SKIN.

PROTECTION:  
SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:  
REFER TO SAFETY SUPERVISOR OR INDUSTRIAL HYGIENIST FOR FURTHER INFORMATION REGARDING PERSONAL PROTECTIVE EQUIPMENT AND ITS APPLICATION.

HYGIENIC PRACTICES:  
WASH THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: -34 - 900 F  
VAPOR DENSITY: HEAVIER THAN AIR  
ODOR: SOLVENT LIKE  
ODOR THRESHOLD: ND  
APPEARANCE: LIQUID  
EVAPORATION RATE: SLOWER THAN ETHER  
SOLUBILITY IN H2O: SLIGHT  
FREEZE POINT: ND  
SPECIFIC GRAVITY:  
VAPOR PRESSURE:

pH: NE

PHYSICAL STATE: LIQUID

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

#### SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:  
AVOID TEMPERATURES ABOVE 120 DEG. F. AVOID ALL POSSIBLE SOURCES OF IGNITION.

INCOMPATIBILITY:  
INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS AND STRONG ALKALIS.

HAZARDOUS DECOMPOSITION:  
OPEN FLAME, CARBON MONOXIDE AND CARBON DIOXIDE. WHEN HEATED TO DECOMPOSITION, IT EMITS ACRID SMOKE AND IRRITATING FUMES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

#### SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50: ND

PRODUCT LC50: ND

CHEMICAL NAME	LD50	LC50
ACETONE	N.D.	N.D.
LIQUEFIED PETROLEUM GAS	N.D.	N.D.
XYLENE	N.D.	N.D.
TOLUENE	N.D.	N.D.
ALIPHATIC PETROLEUM DISTILLATES	N.D.	N.D.
TITANIUM DIOXIDE	>7500 MG/KG (ORAL, RAT)	N.D.
NAPHTHA	>5000 MG/KG (ORAL, RAT)	N.D.
ETHYLBENZENE	3500 MG/KG (ORAL, RAT)	N.D.
AROMATIC HYDROCARBON	N.D.	N.D.
MAGNESIUM SILICATE	N.D.	TCLO: 11 MG/M3 INH.
1,2,4-TRIMETHYLBENZENE	N.D.	18000 MG/M3 (RAT, 4 HR)
AROMATIC SOLVENT	4700 MG/KG (ORAL, RAT)	3670 MG/KG (INH, RAT)
STODDARD SOLVENTS	N.D.	N.D.
ALIPHATIC HYDROCARBON	N.D.	N.D.
PIGMENT YELLOW 73	N.D.	N.D.
PIGMENT BLACK 7	>8000 MG/KG (ORAL, RAT)	N.D.
PIGMENT YELLOW 17	N.D.	N.D.
1,3,5-TRIMETHYLBENZENE	1303 MG/KG (ORAL, RAT)	24 MG/M3 (RAT, 4HR)
PIGMENT VIOLET 32	>10000 MG/KG (ORAL, RAT)	N.D.

#### SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PRODUCT IS A MIXTURE OF LISTED COMPONENTS.

#### SECTION 13 - DISPOSAL INFORMATION

DISPOSAL INFORMATION:  
DISPOSE OF MATERIAL IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS AND ORDINANCES. DO NOT ALLOW TO ENTER STORM DRAINS OR SEWER SYSTEMS.

#### SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: AEROSOL

DOT TECHNICAL NAME:

DOT HAZARD CLASS: 2.1

DOT UN/NA NUMBER: UN1950

PACKING GROUP:

HAZARD SUBCLASS:

RESP. GUIDE PAGE: 126

#### SECTION 15 - REGULATORY INFORMATION

CERCLA - SARA HAZARD CATEGORY:  
THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:  
IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA SECTION 313:  
LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

CHEMICAL NAME	CAS NUMBER
XYLENE	1330-20-7
TOLUENE	108-88-3
ETHYLBENZENE	100-41-4
1,2,4-TRIMETHYLBENZENE	95-63-6

TOXIC SUBSTANCES CONTROL ACT:  
LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES: NONE KNOWN

U.S. STATE REGULATIONS: AS FOLLOWS

NEW JERSEY RIGHT-TO-KNOW:  
THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT.

CHEMICAL NAME	CAS NUMBER
POTASSIUM ALUMINOSILICATE	37244-96-5

PENNSYLVANIA RIGHT-TO-KNOW:  
THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT

GREATER THAN 3%.

CHEMICAL NAME	CAS NUMBER
POTASSIUM ALUMINOSILICATE	37244-96-5
MODIFIED ALKYD	PROPRIETARY
MODIFIED ALKYD	PROPRIETARY
SULFATE	7727-43-7
CALCIUM CARBONATE	1317-65-3
CALIFORNIA PROPOSITION 65:	

WARNING!  
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN BY THE STATE OF CALIFORNIA TO CAUSE CANCER.

WARNING!  
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

INTERNATIONAL REGULATIONS: AS FOLLOWS

CANADIAN WHMIS:  
THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR THE USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS:  
AB5  
D2A  
D2B

SECTION 16 - OTHER INFORMATION

HMIS RATINGS:  
HEALTH 2\*  
FLAMMABILITY 4  
REACTIVITY 0  
PERSONAL PROTECTION X

VOLATILE ORGANIC COMPOUNDS, G/L:

REASON FOR REVISION:

LEGEND:  
N.A. - NOT APPLICABLE  
N.E. - NOT ESTABLISHED  
N.D. - NOT DETERMINED

THE INFORMATION CONTAINED ON THIS MSDS HAS BEEN CHECKED AND SHOULD BE ACCURATE. HOWEVER, IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

ORDER: 10543144076KP13 - Spray Paint Gloss Banner Red 12 Oz HAZMAT: 6KP13

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

\*\*\*\*\*

GRAINGER SHIPPING INFORMATION

STOCK # : 6KP13  
MSDS # : A8809  
FREIGHT CODE : 0843  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D FLASHPOINT -104 DGS C,  
-156 DGS F

FLASHPOINT : -104 DEGREES CELSIUS, -155 DEGREES FAHRENHEIT

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER : ORM-D  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : Consumer Commodity ORM-D

LIMITED QUANTITY : YES  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!  
SHIPPING-PAPERS :

ACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

\*\*\*\*\*

## ITEM: 6MT35 - PAINT SPRAY

PICK REQ: 1105898516

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A5330

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*  
AL SAFETY DATA SHEET - A5330

Related Grainger Item: 6MT35 - PAINT SPRAY

S(R\*)  
SEYMOUR(R\*)MATERIAL SAFETY DATA SHEET  
ACC. TO ISO/DIS 11014PRINTING DATE: 05/20/2003  
REVIEWED ON: 05/20/2003

## 1 IDENTIFICATION OF SUBSTANCE

TRADE NAME: ~~LEW-KOOL-BRIGHT-YELLOW~~

PRODUCT CODE: GR06MT3500

MANUFACTURER/SUPPLIER: SEYMOUR OF SYCAMORE  
917 CROSBY AVENUE  
SYCAMORE, IL 60178  
(815)-895-9101INFORMATION DEPARTMENT: HEALTH & SAFETY DEPARTMENT  
EMERGENCY INFORMATION: CHEMTel: 1-800-255-3924

## 2 COMPOSITION/DATA ON COMPONENTS

CHEMICAL DESCRIPTION:  
THIS PRODUCT IS A MIXTURE OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.

## DANGEROUS COMPONENTS:

67-64-1	ACETONE	XI, F; R 11-36-66-67	35.32%
74-98-6	PROPANE	F+; R 12	15.71%
108-88-3	TOLUENE	XN, F; R 11-20	11.09%
106-97-8	N-BUTANE	F+; R 12	9.23%
107-87-9	METHYL PROPYL KETONE	F; R 11	3.67%
13463-67-7	TITANIUM DIOXIDE	XI; R 37	2.73%
5-6	PM ACETATE	XI; R 10-36	2.25%
10-9	GLYCOL ETHER EP	XI; R 10-36/37/38	1.45%

ADDITIONAL INFORMATION:  
FOR THE WORDING OF THE LISTED RISK PHRASES REFER TO SECTION 3.

## 3 HAZARDS IDENTIFICATION

HAZARD DESCRIPTION:  
XN: HARMFUL  
F+: EXTREMELY FLAMMABLEPHYSICAL AND ENVIRONMENTAL DANGERS:  
WARNING!  
PRESSURIZED CONTAINER.R 12: EXTREMELY FLAMMABLE.  
R 20: HARMFUL BY INHALATION.  
R 36/37: IRRITATING TO EYES AND RESPIRATORY SYSTEM.PRESSURIZED CONTAINER:  
PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C.  
I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.  
KEEP OUT OF THE REACH OF CHILDREN.NFPA RATINGS (SCALE 0-4):  
HEALTH = 1  
FIRE = 4  
REACTIVITY = 3HMIS-RATINGS (SCALE 0-4):  
HEALTH = 1  
FIRE = 3  
PHYSICAL HAZARD = 3

## 4 FIRST AID MEASURES

GENERAL INFORMATION:  
SYMPTOMS OF POISONING MAY OCCUR EVEN AFTER SEVERAL HOURS. MEDICAL  
OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT IS RECOMMENDED.AFTER INHALATION:  
IN CASE OF UNCONSCIOUSNESS, PLACE PATIENT IN SIDE POSITION FOR  
TRANSPORTATION.  
SUPPLY FRESH AIR. IF NECESSARY, PROVIDE ARTIFICIAL RESPIRATION. KEEP PATIENT  
WARM. CONSULT DOCTOR IF SYMPTOMS PERSIST.

AFTER SKIN CONTACT: GENERALLY THE PRODUCT DOES NOT IRRITATE THE SKIN.

AFTER EYE CONTACT:  
OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. IF SYMPTOMS  
PERSIST, CONSULT A DOCTOR.

AFTER SWALLOWING: CONSULT A DOCTOR IF SYMPTOMS PERSIST.

## 5 FIRE FIGHTING MEASURES

EXTINGUISHING AGENTS:  
CO2, SAND, EXTINGUISHING POWDER, OR WATER SPRAY. FIGHT LARGER FIRES WITH  
WATER SPRAY OR ALCOHOL RESISTANT FOAM.

PROTECTIVE EQUIPMENT: MOUNT RESPIRATORY PROTECTIVE DEVICE.

## 6 ACCIDENTAL RELEASE MEASURES

PERSONAL SAFETY PRECAUTIONS:  
WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.ENVIRONMENTAL SAFETY PRECAUTIONS:  
DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEMS OR GROUND WATER.  
INFORM APPROPRIATE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR  
SEWAGE SYSTEM.MEASURES FOR CLEANING/COLLECTING:  
DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS. USE DILUTED CAUSTIC  
SOLUTION. SOAK UP SPILLS WITH INERT ABSORBENT MATERIAL. REFER TO SECTION 13  
FOR DISPOSAL INFORMATION.

## 7 HANDLING AND STORAGE

SAFE HANDLING INFORMATION:  
ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.  
HANDLE CARTON AND CANS WITH CARE.FIRE/EXPLOSION PROTECTION:  
DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.  
KEEP IGNITION SOURCES AWAY - DO NOT SMOKE.  
PROTECT AGAINST ELECTROSTATIC CHARGES.STORAGE REQUIREMENTS:  
OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED  
CONTAINERS. CONSULT WITH YOUR LOCAL AUTHORITIES.  
KEEP AWAY FROM SOURCES OF HEAT AND DIRECT SUNLIGHT. DO NOT WAREHOUSE IN  
SUBFREEZING CONDITIONS.

## 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

67-64-1 ACETONE  
PEL: 2400 MG/M3, 1000 PPM  
REL: 590 MG/M3, 250 PPM  
TLV:  
SHORT-TERM VALUE: 1782 MG/M3, 750 PPM  
LONG-TERM VALUE: 1188 MG/M3, 500 PPM  
BEI74-98-6 PROPANE  
PEL: 1800 MG/M3, 1000 PPM  
REL: 1800 MG/M3, 1000 PPM  
TLV: 4508 MG/M3, 2500 PPM108-88-3 TOLUENE  
PEL:  
SHORT-TERM VALUE: C 300; 500\* PPM  
LONG-TERM VALUE: 200 PPM  
\*10-MIN PEAK PER 8-HR SHIFT  
REL:  
SHORT-TERM VALUE: 560 MG/M3, 150 PPM  
LONG-TERM VALUE: 375 MG/M3, 100 PPM  
TLV: 188 MG/M3, 50 PPM  
SKIN; BEI106-97-8 N-BUTANE  
REL: 1900 MG/M3, 800 PPM  
TLV: 1900 MG/M3, 800 PPM107-87-9 METHYL PROPYL KETONE  
PEL: 700 MG/M3, 200 PPM  
REL: 530 MG/M3, 150 PPM  
TLV:  
SHORT-TERM VALUE: 881 MG/M3, 250 PPM  
LONG-TERM VALUE: 705 MG/M3, 200 PPMPROTECTIVE HYGIENIC MEASURES:  
KEEP AWAY FROM FOODSTUFFS, BEVERAGES, AND ANIMAL FEED.  
IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING:  
WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.BREATHING EQUIPMENT:  
FOR EPISODES OF BRIEF EXPOSURE, USE A RESPIRATORY FILTER DEVICE. IN CASES OF  
INTENSIVE OR LONGER EXPOSURES, USE A RESPIRATORY PROTECTIVE DEVICE THAT IS  
INDEPENDENT OF CIRCULATING AIR.PROTECTION OF HANDS:  
PROTECTIVE GLOVES. THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO  
THE SUBSTANCE. NO GLOVE RECOMMENDATION CAN BE GIVEN.

EYE PROTECTION: TIGHTLY SEALED GOGGLES

## 9 PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION:

FORM: AEROSOL

COLOR: ACCORDING TO TRADE NAME DESCRIPTION IN SECTION 1.

BOILING POINT/BOILING RANGE: -44 DEG. C (-47 DEG. F)

FLASH POINT: -19 DEG. C (-2 DEG. F)

IGNITION TEMPERATURE: 365.0 DEG. C (689 DEG. F)

AUTO IGNITING: PRODUCT IS NOT SELF-IGNITING.

DANGER OF EXPLOSION:  
HEATING MAY CAUSE AN EXPLOSION.  
IN USE, MAY FORM FLAMMABLE/EXPLOSIVE VAPOUR-AIR MIXTURE.

LOWER EXPLOSION LIMIT: 1.2 VOL %  
UPPER EXPLOSION LIMIT: 13.0 VOL %

PRESSURE AT 20 DEG. C (68 DEG. F): 8300.0 HPA (6226 MM HG)

FLAMMABILITY: NOT DETERMINED.

SPECIFIC GRAVITY: BETWEEN 0.77 AND 0.90 (WATER EQUALS 1.00)

VOC CONTENT: 0.45 KG/L / 3.78 LB/GL  
VOC IN WEIGHT PERCENT (LESS ACETONE): 45.3%

SOLIDS CONTENT: 18.9%

#### 10 STABILITY AND REACTIVITY

CONDITIONS TO BE AVOIDED:  
DO NOT ALLOW THE CAN TO EXCEED 120 DEGREES FAHRENHEIT. STABLE AT NORMAL TEMPERATURES.

DANGEROUS REACTIONS: NO DANGEROUS REACTIONS KNOWN.

#### 11 TOXICOLOGICAL INFORMATION

PRIMARY EFFECT ON THE SKIN: NO IRRITANT EFFECT.

PRIMARY EFFECT ON THE EYE: IRRITATING EFFECT.

SENSITIZATION: NO SENSITIZING EFFECTS KNOWN.

ADDITIONAL TOXICOLOGICAL INFORMATION: HARMFUL

#### 12 ECOLOGICAL INFORMATION

OTHER INFORMATION:  
THIS PRODUCT DOES NOT CONTAIN ANY CHLORINATED SOLVENTS OR LEAD. NO SPECIFIC ECOLOGICAL DATA IS AVAILABLE FOR THIS PRODUCT.

AQUATIC TOXICITY:  
HARMFUL TO AQUATIC ORGANISMS.  
HAZARDOUS FOR WATER, DO NOT EMPTY INTO DRAINS.

#### 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:  
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT PUNCTURE, INCINERATE, OR COMPACT. EMPTY CONTAINERS MUST BE HANDLED WITH CARE DUE TO PRODUCT RESIDUE. DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR GAS TORCHES.

RECOMMENDATION:  
DISPOSE WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE.

#### 14 TRANSPORT INFORMATION

HAZARD CLASS: 2.1  
IDENTIFICATION NUMBER: N/A  
LABEL: 2.1

ADR/RID CLASS: 2 GASES  
UN-NUMBER: 1950

IMDG CLASS: 2  
PACKAGING GROUP: II  
EMS NUMBER: F-D, S-U  
MARINE POLLUTANT: NO

ICAO/IATA CLASS: 2.1  
PROPER SHIPPING NAME:  
AEROSOLS, FLAMMABLE  
CONSUMER COMMODITY ORM-D

#### 15 REGULATIONS

SARA SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES):  
NONE OF THE INGREDIENTS IN THIS PRODUCT ARE LISTED.

SARA SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):

108-88-3 TOLUENE

1330-20-7 XYLENE (MIX)

TSCA (TOXIC SUBSTANCES CONTROL ACT):

67-64-1 ACETONE

74-98-6 PROPANE

108-88-3 TOLUENE

106-97-8 N-BUTANE

107-87-9 METHYL PROPYL KETONE

13463-67-7 TITANIUM DIOXIDE

108-65-6 PM ACETATE

12-0 NOVAPERM YELLOW PIGMENT

10-9 GLYCOL ETHER EP

110-19-0 ISOBUTYL ACETATE

51274-00-1 YELLOW IRON OXIDE

64742-95-6 SC-100

64742-47-8 MINERAL SPIRITS

22464-99-9 SOLID ZIRCO DRIER

1330-20-7 XYLENE (MIX)

PROPOSITION 65 CHEMICALS KNOWN TO CAUSE CANCER:  
NONE OF THE INGREDIENTS IN THIS PRODUCT ARE LISTED.

PROPOSITION 65 CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:

108-88-3 TOLUENE

CANADIAN WHMIS:  
THIS PRODUCT HAS BEEN CLASSIFIED ACCORDING TO THE CONTROLLED PRODUCT REGULATIONS AND THE MSDS CONTAINS ALL THE NECESSARY INFORMATION REQUIRED BY THE CPR.  
CLASS B, D5 - FLAMMABLE AEROSOLS

EPA:

A = KNOWN HUMAN CARCINOGEN  
B = PROBABLE HUMAN CARCINOGEN  
C = POSSIBLE HUMAN CARCINOGEN  
D = NOT CLASSIFIABLE AS TO HUMAN CARCINOGENICITY:  
INADEQUATE HUMAN AND ANIMAL EVIDENCE OF CARCINOGENICITY (OR NO DATA IS AVAILABLE).

67-64-1 ACETONE D

108-88-3 TOLUENE D

110-19-0 ISOBUTYL ACETATE D

1330-20-7 XYLENE (MIX) D

100-41-4 ETHYL BENZENE D

IARC:

GROUP 2B:  
THE INGREDIENT IS POSSIBLY CARCINOGENIC TO HUMANS. THERE IS LIMITED EVIDENCE OF CARCINOGENICITY.

GROUP 3:  
THE INGREDIENT IS UNCLASSIFIABLE AS TO ITS CARCINOGENICITY TO HUMANS.

108-88-3 TOLUENE 3

13463-67-7 TITANIUM DIOXIDE 3

1330-20-7 XYLENE (MIX) 3

ACGIH TLVS:

A1-DESIGNATES A CONFIRMED HUMAN CARCINOGEN.  
A2-DESIGNATES A SUSPECTED HUMAN CARCINOGEN.  
A3-DESIGNATES AN ANIMAL CARCINOGEN.  
A4-DESIGNATES "NOT CLASSIFIABLE AS A HUMAN CARCINOGEN".

67-64-1 ACETONE A4

108-88-3 TOLUENE A4

13463-67-7 TITANIUM DIOXIDE A4

110-19-0 ISOBUTYL ACETATE A4

1330-20-7 XYLENE (MIX) A4

NIOSH:

13463-67-7 TITANIUM DIOXIDE

#### 16 OTHER INFORMATION

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

CONTACT:  
CRAIG SNAFFORD  
REGULATORY AFFAIRS

USA

012218355

## MATERIAL SAFETY DATA SHEET (MSDS)

6MT51

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*

AL SAFETY DATA SHEET - A1171

Associated Grainger Items

6MT51

MATERIAL SAFETY DATA SHEET

ACC. TO ISO/DIS 11014

PRINTING DATE: 01/12/2001

REVIEWED ON: 09/19/2000

## -----1 IDENTIFICATION OF SUBSTANCE -----

## PRODUCT DETAILS

TRADE NAME: GLOSS BLACK

PRODUCT CODE: GR06MT5100

MANUFACTURER/SUPPLIER:

SEYMOUR OF SYCAMORE

917 CROSBY AVENUE

SYCAMORE, IL 60178

L) (R\*)

+1 815-895-9101

INFORMATION DEPARTMENT: HEALTH &amp; SAFETY DEPARTMENT

EMERGENCY INFORMATION: CHEMTREC 1 800 255-3924

## -----2 COMPOSITION/DATA ON COMPONENTS -----

## CHEMICAL CHARACTERIZATION:

## DESCRIPTION:

MIXTURE OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.

## DANGEROUS COMPONENTS:

64742-89-8	SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH.	20.6302 %
74-98-6	PROPANE	15.7443 %
1317-65-3	CALCIUM CARBONATE	12.1758 %
106-97-8	BUTANE	9.2466 %
64742-89-8	DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	4.1859 %
64742-95-6	SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.	1.0913 %

## -----3 HAZARDS IDENTIFICATION -----

## HAZARD DESCRIPTION:

TOXIC

EXTREMELY FLAMMABLE

## INFORMATION PERTAINING TO PARTICULAR DANGERS FOR MAN AND ENVIRONMENT:

MAY CAUSE CANCER.

EXTREMELY FLAMMABLE.

HARMFUL BY INHALATION.

IRRITATING TO EYES.

## PRESSURIZED CONTAINER:

PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

CONTAINS 84.7 MASS PERCENT INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

## CLASSIFICATION SYSTEM:

THE CLASSIFICATION WAS MADE ACCORDING TO THE LATEST EDITIONS OF INTERNATIONAL SUBSTANCES LISTS, AND EXPANDED UPON FROM COMPANY AND LITERATURE DATA.

## NPPA RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 4

REACTIVITY = 3

## HMIS - RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 3

REACTIVITY = 3

## -----4 FIRST AID MEASURES -----

## GENERAL INFORMATION:

SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.

## AFTER INHALATION:

SUPPLY FRESH AIR. IF REQUIRED, PROVIDE ARTIFICIAL RESPIRATION. KEEP PATIENT WARM. CONSULT DOCTOR IF SYMPTOMS PERSIST.

IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY IN SIDE POSITION FOR TRANSPORTATION.

## AFTER SKIN CONTACT:

IMMEDIATELY RINSE WITH WATER.

## AFTER EYE CONTACT:

RINSE OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. IF SYMPTOMS PERSIST, CONSULT A DOCTOR.

## AFTER SWALLOWING:

IF SYMPTOMS PERSIST CONSULT DOCTOR.

-----5 FIRE FIGHTING MEASURES -----

SUITABLE EXTINGUISHING AGENTS:

ND, EXTINGUISHING POWDER. DO NOT USE WATER.

FOR SAFETY REASONS UNSUITABLE EXTINGUISHING AGENTS:

WATER

WATER WITH FULL JET

PROTECTIVE EQUIPMENT:

MOUNT RESPIRATORY PROTECTIVE DEVICE.

-----6 ACCIDENTAL RELEASE MEASURES -----

PERSON-RELATED SAFETY PRECAUTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.

MEASURES FOR ENVIRONMENTAL PROTECTION:

DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE.

INFORM RESPECTIVE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR SEWAGE SYSTEM.

DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

MEASURES FOR CLEANING/COLLECTING:

DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO ITEM 13.

ENSURE ADEQUATE VENTILATION.

DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS.

-----7 HANDLING AND STORAGE -----

HANDLING:

INFORMATION FOR SAFE HANDLING:

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

OPEN AND HANDLE RECEPTACLE WITH CARE.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES:

KEEP IGNITION SOURCES AWAY - DO NOT SMOKE.

PROTECT AGAINST ELECTROSTATIC CHARGES.

KEEP RESPIRATORY PROTECTIVE DEVICE AVAILABLE.

PRESSURIZED CONTAINER:

PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C.  
I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.

STORAGE:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:

STORE IN A COOL LOCATION.

OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED CONTAINERS.

INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY:

REQUIRED.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS:

KEEP RECEPTACLE TIGHTLY SEALED.

DO NOT GAS TIGHT SEAL RECEPTACLE.

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLES.

PROTECT FROM HEAT AND DIRECT SUNLIGHT.

-----8 EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS:

NO FURTHER DATA; SEE ITEM 7.

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

74-98-6 PROPANE

ACGIH TLV 4508 MG/M3, 2500 PPM

NIOSH REL 1800 MG/M3, 1000 PPM

OSHA PEL 1800 MG/M3, 1000 PPM

1317-65-3 CALCIUM CARBONATE

ACGIH TLV 10 MG/M3

(E)

NIOSH REL 10\*; 5\*\* MG/M3

\*TOTAL DUST \*\*RESPIRABLE FRACTION

OSHA PEL 15\*; 5\*\* MG/M3

\*TOTAL DUST \*\*RESPIRABLE FRACTION

106-97-8 BUTANE

ACGIH TLV 1900 MG/M3, 800 PPM

NIOSH REL 1900 MG/M3, 800 PPM

ADDITIONAL INFORMATION:

THE LISTS THAT WERE VALID DURING THE CREATION WERE USED AS BASIS.

PERSONAL PROTECTIVE EQUIPMENT:

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.

IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING.

WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.

STORE PROTECTIVE CLOTHING SEPARATELY.

AVOID CONTACT WITH THE EYES.

AVOID CONTACT WITH THE EYES AND SKIN.

BREATHING EQUIPMENT:

IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN  
CASE OF INTENSIVE OR LONGER EXPOSURE USE RESPIRATORY PROTECTIVE DEVICE THAT  
IS INDEPENDENT OF CIRCULATING AIR.

PROTECTION OF HANDS:

PROTECTIVE GLOVES

EYE PROTECTION:

TIGHTLY SEALED GOGGLES

-----9 PHYSICAL AND CHEMICAL PROPERTIES -----

FORM:

AEROSOL

COLOR:

ACCORDING TO PRODUCT SPECIFICATION

CHARACTERISTIC

CHANGE IN CONDITION

MELTING POINT/MELTING RANGE: UNDETERMINED.

BOILING POINT/BOILING RANGE: -44 DEG. C (-47 DEG. F)

FLASH POINT:

-19 DEG. C (-2 DEG. F)

IGNITION TEMPERATURE:

365.0 DEG. C (689 DEG. F)

AUTO IGNITING:

PRODUCT IS NOT SELF IGNITING.

DANGER OF EXPLOSION:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C, I.E., ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

EXPLOSION LIMITS:

LOWER: 1.7 VOL %

UPPER: 10.9 VOL %

PRESSURE AT 20 DEG. C (68 DEG. F):

850.0 HPA

DENSITY:

NOT DETERMINED.

SOLUBILITY IN /MISCIBILITY WITH

WATER: NOT MISCIBLE OR DIFFICULT TO MIX.

SOLVENT CONTENT:

ORGANIC SOLVENTS: 47.5%

WATER: 25.2%

SOLIDS CONTENT: 15.3%

-----10 STABILITY AND REACTIVITY -----

THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED:

NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

DANGEROUS REACTIONS:

NO DANGEROUS REACTIONS KNOWN.

DANGEROUS PRODUCTS OF DECOMPOSITION:

DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

-----11 TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRIMARY IRRITANT EFFECT:

ON THE SKIN: NO IRRITANT EFFECT.

ON THE EYE: IRRITATING EFFECT.

SENSITIZATION:

NO SENSITIZING EFFECTS KNOWN.

ADDITIONAL TOXICOLOGICAL INFORMATION:

THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED CALCULATION METHODS FOR PREPARATIONS:

HARMFUL.

IRRITANT.

CARCINOGENIC.

-----12 ECOLOGICAL INFORMATION -----

GENERAL NOTES:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER

DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM.

DANGER TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND.

-----13 DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT PUNCTURE, INCINERATE, OR COMPACT. EMPTY CONTAINERS MUST BE HANDLED WITH CARE DUE TO PRODUCT RESIDUE. DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR GAS TORCHES.

PRODUCT:

RECOMMENDATION:

MUST NOT BE DISPOSED OF TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM.

UNCLEANED PACKAGINGS:

RECOMMENDATION:

DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

-----14 TRANSPORT INFORMATION -----

DOT REGULATIONS:

FLAMMABLE GAS,

CLASS/DIVISION 2.1

HAZARD CLASS: 2.1

IDENTIFICATION NUMBER: UN1950

PACKING GROUP: -

PROPER SHIPPING NAME (TECHNICAL NAME): AEROSOLS, FLAMMABLE, N.O.S. PROPANE

LAND TRANSPORT ADR/RID (CROSS-BORDER):

CLASS 2

FLAMMABLE GASES

ADR/RID CLASS: 2 GASES  
ITEM: 5 F  
DANGER CODE (KEMLER): -  
ER: 1950  
CLASSIFICATION OF GOODS: 1950 AEROSOLS

MARITIME TRANSPORT IMDG:  
FLAMMABLE GAS  
CLASS/DIVISION 2

IMDG CLASS: 2  
PAGE: 2102  
UN NUMBER: 1950  
PACKAGING GROUP: -  
EMS NUMBER: 2-13  
MFAG: 620  
MARINE POLLUTANT: NO  
PROPER SHIPPING NAME: AEROSOLS

AIR TRANSPORT ICAO-TI AND IATA-DGR:  
FLAMMABLE GAS  
CLASS/DIVISION 2.1

ICAO/IATA CLASS: 2.1  
UN/ID NUMBER: 1950  
PACKAGING GROUP: -  
PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, N.O.S., PROPANE

15 REGULATIONS -----

SARA

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES):  
NONE OF THE INGREDIENT IS LISTED.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):

1330-20-7 XYLENE (MIX)  
100-41-4 ETHYLBENZENE

TSCA (TOXIC SUBSTANCES CONTROL ACT):

7732-18-5 WATER  
64742-89-8 SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH.  
74-98-6 PROPANE  
106-97-8 BUTANE  
64742-47-8 DISTILLATES (PETROLEUM), HYDROTREATED LIGHT  
64742-95-6 SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.  
2425-85-6 1-(4-METHYL-2-NITROPHENYL-AZO)-2-NAPHTHOL  
13463-67-7 TITANIUM DIOXIDE  
1330-20-7 XYLENE (MIX)  
100-41-4 ETHYLBENZENE

PROPOSITION 65

CHEMICALS KNOWN TO CAUSE CANCER:  
NONE OF THE INGREDIENTS IS LISTED.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:  
NONE OF THE INGREDIENTS IS LISTED.

PRODUCT RELATED HAZARD INFORMATIONS:

THE PRODUCT HAS BEEN CLASSIFIED AND MARKED IN ACCORDANCE WITH DIRECTIVES ON  
HAZARDOUS MATERIALS.

HAZARD SYMBOLS:

TOXIC  
EXTREMELY FLAMMABLE

HAZARD-DETERMINING COMPONENTS OF LABELING:

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.

RISK PHRASES:

MAY CAUSE CANCER.  
EXTREMELY FLAMMABLE.  
HARMFUL BY INHALATION.  
IRRITATING TO EYES.

SAFETY PHRASES:

AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.  
KEEP LOCKED UP AND OUT OF THE REACH OF CHILDREN.  
DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY.  
DO NOT EMPTY INTO DRAINS, DISPOSE OF THIS MATERIAL AND ITS CONTAINER AT  
HAZARDOUS OR SPECIAL WASTE COLLECTION POINT  
IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

SPECIAL LABELING OF CERTAIN PREPARATIONS:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.  
CONTAINS 84.7 MASS PERCENT INFLAMMABLE MATERIALS.  
KEEP OUT OF THE REACH OF CHILDREN.

NATIONAL REGULATIONS:

TECHNICAL INSTRUCTIONS (AIR):

CLASS	SHARE IN %
WATER	25.2
II	1.9
III	25.0
NK	20.6

WATER HAZARD CLASS:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER.

-----16 OTHER INFORMATION -----

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT  
CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT  
ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

CONTACT: CRAIG SWAFFORD

USA

When shipment is complete, retain for daily Hazmat audit.

#####

## R SHIPPING INFORMATION

STOCK # : 6MT51  
MSDS # : A1171  
FREIGHT CODE : 0800  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D

UPS RESTRICTIONS : 20 LB. & UNDER REQUIRES 200 LB. BSC/32 ECT,  
21 LB. & OVER REQUIRES 275 LB. BSC/44 ECT.

## HAZARDOUS CLASS NUMBER :

UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : ORM-D

LIMITED QUANTITY : Y

CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON

EXCEPTION :

DOT/UPS EXEMPTION NO. :

COMMENTS 1 : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!

COMMENTS 2 :

SHIPPING PAPERS : AUTOMATED BILL OF LADING REQUIRED FOR TRUCK SHIPMENTS.

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

ERG TO ACCOMPANY SHIPMENT

.....

0125076534

MATERIAL SAFETY DATA SHEET (MSDS)

6MT33

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*

L SAFETY DATA SHEET - A1153

Associated Grainger Items

6MT33

MATERIAL SAFETY DATA SHEET

ACC. TO ISO/DIS 11014

PRINTING DATE: 01/12/2001

REVIEWED ON: 09/19/2000

-----1 IDENTIFICATION OF SUBSTANCE -----

PRODUCT DETAILS:

TRADE NAME: GLOSS YELLOW

PRODUCT CODE: GR06MT3300

MANUFACTURER/SUPPLIER: SEYMOUR OF SYCAMORE

917 CROSBY AVENUE

SYCAMORE, IL 60178

+1 815-895-9101

INFORMATION DEPARTMENT: HEALTH & SAFETY DEPARTMENT

EMERGENCY INFORMATION: CHEMTREC 1 800 255 3924

-----2 COMPOSITION/DATA ON COMPONENTS -----

CHEMICAL CHARACTERIZATION:

DESCRIPTION:

MIXTURE OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.

DANGEROUS COMPONENTS: VOID

-----3 HAZARDS IDENTIFICATION -----

HAZARD DESCRIPTION:

TOXIC

EXTREMELY FLAMMABLE

CAUTION PERTAINING TO PARTICULAR DANGERS FOR MAN AND ENVIRONMENT:

CAUSE CANCER.

EXTREMELY FLAMMABLE.

HARMFUL BY INHALATION.

IRRITATING TO EYES.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO

TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR

BURN, EVEN AFTER USE.

CONTAINS 82.2 MASS PERCENT INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

CLASSIFICATION SYSTEM:

THE CLASSIFICATION WAS MADE ACCORDING TO THE LATEST EDITIONS OF INTERNATIONAL SUBSTANCES LISTS, AND EXPANDED UPON FROM COMPANY AND LITERATURE DATA.

NFPA RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 4

REACTIVITY = 3

HMIS-RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 3

REACTIVITY = 3

-----4 FIRST AID MEASURES -----

GENERAL INFORMATION:

SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.

AFTER INHALATION:

SUPPLY FRESH AIR. IF REQUIRED, PROVIDE ARTIFICIAL RESPIRATION. KEEP PATIENT WARM. CONSULT DOCTOR IF SYMPTOMS PERSIST.

IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY IN SIDE POSITION FOR TRANSPORTATION.

AFTER SKIN CONTACT: IMMEDIATELY RINSE WITH WATER.

AFTER EYE CONTACT:

RINSE OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. IF SYMPTOMS PERSIST, CONSULT A DOCTOR.

AFTER SWALLOWING: IF SYMPTOMS PERSIST CONSULT DOCTOR.

-----5 FIRE FIGHTING MEASURES -----

SUITABLE EXTINGUISHING AGENTS:

CO2, SAND, EXTINGUISHING POWDER. DO NOT USE WATER.

FOR SAFETY REASONS UNSUITABLE EXTINGUISHING AGENTS:

WATER

WATER WITH FULL JET

PROTECTIVE EQUIPMENT: MOUNT RESPIRATORY PROTECTIVE DEVICE.

-----6 ACCIDENTAL RELEASE MEASURES -----

PERSON-RELATED SAFETY PRECAUTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.

MEASURES FOR ENVIRONMENTAL PROTECTION:

DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE.

INFORM RESPECTIVE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR SEWAGE SYSTEMS.

ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

MEASURES FOR CLEANING/COLLECTING:

DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO ITEM 13.

ENSURE ADEQUATE VENTILATION.

DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS

-----7 HANDLING AND STORAGE -----

HANDLING:

INFORMATION FOR SAFE HANDLING:

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

OPEN AND HANDLE RECEPTACLE WITH CARE.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES:

KEEP IGNITION SOURCES AWAY - DO NOT SMOKE.

PROTECT AGAINST ELECTROSTATIC CHARGES.

KEEP RESPIRATORY PROTECTIVE DEVICE AVAILABLE.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.

SL JB:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:

STORE IN A COOL LOCATION.

OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED CONTAINERS.

INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY: NOT REQUIRED.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS:

KEEP RECEPTACLE TIGHTLY SEALED.

DO NOT GAS TIGHT SEAL RECEPTACLE.

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLES.

PROTECT FROM HEAT AND DIRECT SUNLIGHT.

-----8 EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS:

NO FURTHER DATA; SEE ITEM 7.

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

THE PRODUCT DOES NOT CONTAIN ANY RELEVANT QUANTITIES OF MATERIALS WITH LIMIT VALUES THAT HAVE TO BE MONITORED AT THE WORKPLACE.

ADDITIONAL INFORMATION:

THE LISTS THAT WERE VALID DURING THE CREATION WERE USED AS BASIS.

PERSONAL PROTECTIVE EQUIPMENT:

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.

IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING.

WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.

STORE PROTECTIVE CLOTHING SEPARATELY.

AVOID CONTACT WITH THE EYES.

AVOID CONTACT WITH THE EYES AND SKIN.

BREATHING EQUIPMENT:

IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN CASE OF INTENSIVE OR LONGER EXPOSURE USE RESPIRATORY PROTECTIVE DEVICE THAT IS INDEPENDENT OF CIRCULATING AIR.

PROTECTION OF HANDS: PROTECTIVE GLOVES

EYE PROTECTION: TIGHTLY SEALED GOGGLES

-----9 PHYSICAL AND CHEMICAL PROPERTIES -----

FORM: AEROSOL

COLOR: ACCORDING TO PRODUCT SPECIFICATION

ODOR: CHARACTERISTIC

CHANGE IN CONDITION:

MELTING POINT/MELTING RANGE: UNDETERMINED

BOILING POINT/BOILING RANGE: -44 DEG. C (-47 DEG. F)

FLASH POINT: -19 DEG. C (-2 DEG. F)

IGNITION TEMPERATURE: 365.0 DEG. C (689 DEG. F)

AUTO IGNITING: PRODUCT IS NOT SELFIGNITING.

DANGER OF EXPLOSION:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

EXPLOSION LIMITS:

LOWER: 1.1 VOL %

UPPER: 13.0 VOL %

VAPOR PRESSURE AT 20 DEG. C (68 DEG. F): 8300.0 HPA

DENSITY: NOT DETERMINED.

SOLUBILITY IN/MISCIBILITY WITH WATER: NOT MISCIBLE OR DIFFICULT TO MIX.

SOLVENT CONTENT:

ORGANIC SOLVENTS: 0.0%

SOLIDS CONTENT: 17.8%

-----10 STABILITY AND REACTIVITY -----

THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED:  
NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

HAZARDOUS REACTIONS: NO DANGEROUS REACTIONS KNOWN.

DANGEROUS PRODUCTS OF DECOMPOSITION:  
NO DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

-----11 TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRIMARY IRRITANT EFFECT:  
ON THE SKIN: NO IRRITANT EFFECT.  
ON THE EYE: IRRITATING EFFECT.

SENSITIZATION: NO SENSITIZING EFFECTS KNOWN.

ADDITIONAL TOXICOLOGICAL INFORMATION:  
THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED  
CALCULATION METHODS FOR PREPARATIONS:  
HARMFUL.  
IRRITANT.  
CARCINOGENIC.

-----12 ECOLOGICAL INFORMATION -----

GENERAL NOTES:  
HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER  
DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM.  
DANGER TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND.

-----13 DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:  
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT  
PUNCTURE, INCINERATE, OR COMPACT. EMPTY CONTAINERS MUST BE HANDLED WITH CARE  
DUE TO PRODUCT RESIDUE. DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR  
GAS TORCHES.

PRODUCT:

RECOMMENDATION:  
MUST NOT BE DISPOSED OF TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW  
PRODUCT TO REACH SEWAGE SYSTEM.

UNCLEANED PACKAGINGS:

RECOMMENDATION: DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

-----14 TRANSPORT INFORMATION -----

DOT REGULATIONS:  
FLAMMABLE GAS - 2

HAZARD CLASS: 2.1

IDENTIFICATION NUMBER: UN1950

PACKING GROUP: -

PROPER SHIPPING NAME (TECHNICAL NAME): AEROSOLS, FLAMMABLE, N.O.S., PROPANE

LAND TRANSPORT ADR/RID (CROSS-BORDER):  
FLAMMABLE GAS

ADR/RID CLASS: 2 GASES

ITEM: 5 F

DANGER CODE (KEMLER): -

UN-NUMBER: 1950

DESCRIPTION OF GOODS: 1950 AEROSOLS

MARITIME TRANSPORT IMDG:  
FLAMMABLE GAS - 2

IMDG CLASS: 2

PAGE: 2102

UN NUMBER: 1950

PACKAGING GROUP: -

EMS NUMBER: 2-13

MFAG: 620

MARINE POLLUTANT: NO

PROPER SHIPPING NAME: AEROSOLS

AIR TRANSPORT ICAO-TI AND IATA-DGR:  
FLAMMABLE GAS - 2

ICAO/IATA CLASS: 2.1

UN/ID NUMBER: 1950

PACKAGING GROUP: -

PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, N.O.S., PROPANE

-----15 REGULATIONS -----

SARA:

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES):

NONE OF THE INGREDIENT IS LISTED.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):

THE INGREDIENTS IS LISTED.

TSCA (TOXIC SUBSTANCES CONTROL ACT): NONE OF THE INGREDIENTS IS LISTED.

PROPOSITION 65:

CHEMICALS KNOWN TO CAUSE CANCER: NONE OF THE INGREDIENTS IS LISTED.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:

NONE OF THE INGREDIENTS IS LISTED.

PRODUCT RELATED HAZARD INFORMATION:

THE PRODUCT HAS BEEN CLASSIFIED AND MARKED IN ACCORDANCE WITH DIRECTIVES ON  
HAZARDOUS MATERIALS.

HAZARD SYMBOLS:

TOXIC

EXTREMELY FLAMMABLE

HAZARD-DETERMINING COMPONENTS OF LABELLING:

SOLVENT-NAPHTHA (PETROLEUM), LIGHT AROM.

PHRASES:

CAUSE CANCER.

EXTREMELY FLAMMABLE.

HAZARDOUS BY INHALATION.

IRRITATING TO EYES.

SAFETY PHRASES:

AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.

KEEP LOCKED UP AND OUT OF THE REACH OF CHILDREN.

DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY.

DO NOT EMPTY INTO DRAINS, DISPOSE OF THIS MATERIAL AND ITS CONTAINER AT  
HAZARDOUS OR SPECIAL WASTE COLLECTION POINT

IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

SPECIAL LABELING OF CERTAIN PREPARATIONS:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.

CONTAINS 82.2 MASS PERCENT OF INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

NATIONAL REGULATIONS:

WATER HAZARD CLASS:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER.

-----16 OTHER INFORMATION -----

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT  
CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT  
ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

CONTACT: CRAIG SWAFFORD

When shipment is complete, retain for daily Hazmat audit.

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2 SHIPPING INFORMATION

STOCK # : 6MT33  
MSDS # : A1153  
FREIGHT CODE : 0800  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D

UPS RESTRICTIONS : 20 LB. & UNDER REQUIRES 200 LB. BSC/32 ECT,  
21 LB. & OVER REQUIRES 275 LB. BSC/44 ECT.

## HAZARDOUS CLASS NUMBER :

UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : ORM-D

LIMITED QUANTITY : Y

CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON

EXCEPTION :

DOT/UPS EXEMPTION NO. :

COMMENTS 1 : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!

COMMENTS 2 :

SHIPPING PAPERS : AUTOMATED BILL OF LADING REQUIRED FOR TRUCK SHIPMENTS.

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

TO ACCOMPANY SHIPMENT  
\*\*\*\*\*

0122988355

MATERIAL SAFETY DATA SHEET (MSDS)

6MT53

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A1173

Associated Grainger Items  
6MT53

MATERIAL SAFETY DATA SHEET  
ACC. TO ISO/DIS 11014

PRINTING DATE: 01/12/2001  
REVIEWED ON: 09/19/2000

-----1 IDENTIFICATION OF SUBSTANCE -----

PRODUCT DETAILS

TRADE NAME: LOW LUSTER BLACK

PRODUCT CODE: GR06MT5300

MANUFACTURER/SUPPLIER

SEYMOUR OF SYCAMORE  
917 CROSBY AVENUE  
SYCAMORE, IL 60178

(L) (R\*)

+1 815-895-9101

INFORMATION DEPARTMENT: HEALTH & SAFETY DEPARTMENT

EMERGENCY INFORMATION: CHEMTREC 1 800 255 3924

-----2 COMPOSITION/DATA ON COMPONENTS -----

CHEMICAL CHARACTERIZATION:

DESCRIPTION:

MIXTURE OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.

DANGEROUS COMPONENTS: VOID

-----3 HAZARDS IDENTIFICATION -----

HAZARD DESCRIPTION:

TOXIC

EXTREMELY FLAMMABLE

CAUTION PERTAINING TO PARTICULAR DANGERS FOR MAN AND ENVIRONMENT:

MAY CAUSE CANCER.

EXTREMELY FLAMMABLE.

HARMFUL BY INHALATION.

IRRITATING TO EYES.

PRESSURIZED CONTAINER:

PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C,  
I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

CONTAINS 85.7 MASS PERCENT INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

CLASSIFICATION SYSTEM:

THE CLASSIFICATION WAS MADE ACCORDING TO THE LATEST EDITIONS OF  
INTERNATIONAL SUBSTANCES LISTS, AND EXPANDED UPON FROM COMPANY AND  
LITERATURE DATA.

NFPA RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 4

REACTIVITY = 3

HMIS - RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 3

REACTIVITY = 3

-----4 FIRST AID MEASURES -----

GENERAL INFORMATION:

SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL  
OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.

AFTER INHALATION:

SUPPLY FRESH AIR. IF REQUIRED, PROVIDE ARTIFICIAL RESPIRATION. KEEP PATIENT  
WARM. CONSULT DOCTOR IF SYMPTOMS PERSIST.

IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY IN SIDE POSITION FOR  
TRANSPORTATION.

AFTER SKIN CONTACT:

IMMEDIATELY RINSE WITH WATER.

AFTER EYE CONTACT:

RINSE OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. IF SYMPTOMS  
PERSIST, CONSULT A DOCTOR.

AFTER SWALLOWING:

IF SYMPTOMS PERSIST CONSULT DOCTOR.

-----5 FIRE FIGHTING MEASURES -----

SUITABLE EXTINGUISHING AGENTS:

CO2, SAND, EXTINGUISHING POWDER. DO NOT USE WATER.

FOR SAFETY REASONS UNSUITABLE EXTINGUISHING AGENTS:

WATER

WATER WITH FULL JET

PROTECTIVE EQUIPMENT:

MOUNT RESPIRATORY PROTECTIVE DEVICE.

-----6 ACCIDENTAL RELEASE MEASURES -----

PER. .-RELATED SAFETY PRECAUTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.

MEASURES FOR ENVIRONMENTAL PROTECTION:

DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE.  
INFORM RESPECTIVE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR  
SEWAGE SYSTEM.  
DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

MEASURES FOR CLEANING/COLLECTING:

DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO ITEM 13.  
ENSURE ADEQUATE VENTILATION.  
DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS.

-----7 HANDLING AND STORAGE -----

HANDLING:

INFORMATION FOR SAFE HANDLING:

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.  
OPEN AND HANDLE RECEPTACLE WITH CARE.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES:

KEEP IGNITION SOURCES AWAY - DO NOT SMOKE.

TECT AGAINST ELECTROSTATIC CHARGES.

---RESPIRATORY PROTECTIVE DEVICE AVAILABLE.

PRESSURIZED CONTAINER:

PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C,  
I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.

STORAGE:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:

STORE IN A COOL LOCATION.

OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED  
CONTAINERS.

INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY:

NOT REQUIRED.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS:

KEEP RECEPTACLE TIGHTLY SEALED.

DO NOT GAS TIGHT SEAL RECEPTACLE.

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLES.

PROTECT FROM HEAT AND DIRECT SUNLIGHT.

-----8 EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

IONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS:

NO FURTHER DATA; SEE ITEM 7.

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

THE PRODUCT DOES NOT CONTAIN ANY RELEVANT QUANTITIES OF MATERIALS WITH

CRITICAL VALUES THAT HAVE TO BE MONITORED AT THE WORKPLACE.

ADDITIONAL INFORMATION:

THE LISTS THAT WERE VALID DURING THE CREATION WERE USED AS BASIS.

PERSONAL PROTECTIVE EQUIPMENT:

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.  
IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING.  
WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.  
STORE PROTECTIVE CLOTHING SEPARATELY.  
AVOID CONTACT WITH THE EYES.  
AVOID CONTACT WITH THE EYES AND SKIN.

BREATHING EQUIPMENT:

IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN  
CASE OF INTENSIVE OR LONGER EXPOSURE USE RESPIRATORY PROTECTIVE DEVICE THAT  
IS INDEPENDENT OF CIRCULATING AIR.

PROTECTION OF HANDS:

PROTECTIVE GLOVES

EYE PROTECTION:

TIGHTLY SEALED GOGGLES

-----9 PHYSICAL AND CHEMICAL PROPERTIES -----

FORM:

AEROSOL

COLOR:

ACCORDING TO PRODUCT SPECIFICATION

ODOR:

CHARACTERISTIC

CHANGE IN CONDITION

MELTING POINT/MELTING RANGE: UNDETERMINED.

BOILING POINT/BOILING RANGE: -44 DEG. C (-47 DEG. F)

FLASH POINT:

-19 DEG. C (-2 DEG. F)

IGNITION TEMPERATURE:

365.0 DEG. C (689 DEG. F)

AUTO IGNITING:

PRODUCT IS NOT SELF IGNITING.

DANGER OF EXPLOSION:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C, I.E., ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.

EXPLOSION LIMITS:

LOWER: 1.7 VOL %

UPPER: 13.0 VOL %

VAPOR PRESSURE AT 20 DEG. C (68 DEG. F):

100.0 HPA

DEN. : :

NOT DETERMINED.

SOLUBILITY IN /MISCIBILITY WITH

WATER: NOT MISCIBLE OR DIFFICULT TO MIX.

SOLVENT CONTENT:

ORGANIC SOLVENTS: 0.0 %

SOLIDS CONTENT: 14.3%

-----10 STABILITY AND REACTIVITY -----

THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED:

NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

DANGEROUS REACTIONS:

NO DANGEROUS REACTIONS KNOWN.

DANGEROUS PRODUCTS OF DECOMPOSITION:

NO DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

-----11 TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRIMARY IRRITANT EFFECT:

ON THE SKIN: NO IRRITANT EFFECT.

ON THE EYE: IRRITATING EFFECT.

SENSITIZATION:

NO SENSITIZING EFFECTS KNOWN.

ADDITIONAL TOXICOLOGICAL INFORMATION:

THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED

CALCULATION METHODS FOR PREPARATIONS:

HARMFUL.

IRRITANT.

CARCINOGENIC.

-----12 ECOLOGICAL INFORMATION -----

GENERAL NOTES:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER

DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM.

DO NOT DRINK TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND.

-----13 DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT PUNCTURE, INCINERATE, OR COMPACT. EMPTY CONTAINERS MUST BE HANDLED WITH CARE DUE TO PRODUCT RESIDUE. DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR GAS TORCHES.

PRODUCT:

RECOMMENDATION:

MUST NOT BE DISPOSED OF TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM.

UNCLEANED PACKAGINGS:

RECOMMENDATION:

DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

-----14 TRANSPORT INFORMATION -----

DOT REGULATIONS:

FLAMMABLE GAS,

CLASS/DIVISION 2.1

HAZARD CLASS: 2.1

IDENTIFICATION NUMBER: UN1950

PACKING GROUP: -

PROPER SHIPPING NAME (TECHNICAL NAME): AEROSOLS, FLAMMABLE, N.O.S. PROPANE

LAND TRANSPORT ADR/RID (CROSS-BORDER):

CLASS 2

FLAMMABLE GASES

ADR/RID CLASS: 2 GASES

ITEM: 5 F

DANGER CODE (KEMLER): -

UN-NUMBER: 1950

DESCRIPTION OF GOODS: 1950 AEROSOLS

MARITIME TRANSPORT IMDG:

FLAMMABLE GAS

CLASS/DIVISION 2

IMDG CLASS: 2

UN NUMBER: 1950

PACKAGING GROUP: -

EMS NUMBER: 2-13

MFAG: 620

MARINE POLLUTANT: NO

PROPER SHIPPING NAME: AEROSOLS

AIR TRANSPORT ICAO-TI AND IATA-DGR:

FLAMMABLE GAS

CLASS/DIVISION 2.1

ICAO/IATA CLASS: 2.1

UN/ID NUMBER: 1950

PACKAGING GROUP: -

PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, N.O.S., PROPANE

**GARA**

V 355 (EXTREMELY HAZARDOUS SUBSTANCES):

IF THE INGREDIENT IS LISTED.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):

NONE OF THE INGREDIENTS IS LISTED.

TSCA (TOXIC SUBSTANCES CONTROL ACT):

NONE OF THE INGREDIENTS IS LISTED.

PROPOSITION 65

CHEMICALS KNOWN TO CAUSE CANCER:

NONE OF THE INGREDIENTS IS LISTED.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:

NONE OF THE INGREDIENTS IS LISTED.

PRODUCT RELATED HAZARD INFORMATION:

THE PRODUCT HAS BEEN CLASSIFIED AND MARKED IN ACCORDANCE WITH DIRECTIVES ON  
HAZARDOUS MATERIALS.

HAZARD SYMBOLS:

TOXIC

**EXTREMELY FLAMMABLE**

RD-DETERMINING COMPONENTS OF LABELING:

1-T NAPHTHA (PETROLEUM), LIGHT AROM.

**RISK PHRASES:**

**MAY CAUSE CANCER.**

EXTREMELY FLAMMABLE.

HARMFUL BY INHALATION.

◆

IRRITATING TO EYES.

**SAFETY PHRASES:**

AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.

KEEP LOCKED UP AND OUT OF THE REACH OF CHILDREN.

**DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY.**

DO NOT EMPTY INTO DRAINS, DISPOSE OF THIS MATERIAL AND ITS CONTAINER AT  
HAZARDOUS OR SPECIAL WASTE COLLECTION POINT

IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

**SPECIAL LABELING OF CERTAIN PREPARATIONS:**

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO

TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE.

CONTAINS 85.7 MASS PERCENT INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

NATIONAL REGULATIONS:

WATER HAZARD CLASS:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER.

-----16 OTHER INFORMATION -----

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT  
CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT  
ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

CONTACT: CRAIG SWAFFORD

USA

When shipment is complete, retain for daily Hazmat audit.

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AIR SHIPPING INFORMATION

STOCK # : 6MT53  
MSDS # : A1173  
FREIGHT CODE : 0800  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D

UPS RESTRICTIONS : 20 LB. & UNDER REQUIRES 200 LB. BSC/32 ECT,  
21 LB. & OVER REQUIRES 275 LB. BSC/44 ECT.

## HAZARDOUS CLASS NUMBER :

UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : ORM-D

LIMITED QUANTITY : Y

CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON

EXCEPTION :

DOT/UPS EXEMPTION NO. :

COMMENTS 1 : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!

COMMENTS 2 :

SHIPPING PAPERS : AUTOMATED BILL OF LADING REQUIRED FOR TRUCK SHIPMENTS.

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

TO ACCOMPANY SHIPMENT

\*\*\*\*\*

MATERIAL SAFETY DATA SHEET

ACC. TO ISO/DIS 11014

DATE: 01/12/2001

ISSUED ON: 09/19/2000

-----1 IDENTIFICATION OF SUBSTANCE -----

PRODUCT DETAILS:

TRADE NAME: RED PRIMER

PRODUCT CODE: CROSBY800

DEMNOTE  
brange #  
SPRAY CANS

11/26/02

MANUFACTURER/SUPPLIER: SEYMOUR OF SYCAMORE

917 CROSBY AVENUE

SYCAMORE, IL 60178

+1 815-895-9101

S(R\*)

INFORMATION DEPARTMENT: HEALTH & SAFETY DEPARTMENT

EMERGENCY INFORMATION: CHEMTREC 1 800 255 3924

-----2 COMPOSITION/DATA ON COMPONENTS -----

CHEMICAL CHARACTERIZATION:

ATION:

OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.

DANGEROUS COMPONENTS: VOID

-----3 HAZARDS IDENTIFICATION -----

HAZARD DESCRIPTION:

TOXIC

EXTREMELY FLAMMABLE

INFORMATION PERTAINING TO PARTICULAR DANGERS FOR MAN AND ENVIRONMENT:

MAY CAUSE CANCER.

EXTREMELY FLAMMABLE.

HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.

IRRITATING TO EYES.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO

TEMPERATURES EXCEEDING 50 DEG. C. I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR

BURN, EVEN AFTER USE.

CONTAINS 78.4 MASS PERCENT INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

CLASSIFICATION SYSTEM:

THE CLASSIFICATION WAS MADE ACCORDING TO THE LATEST EDITIONS OF  
INTERNATIONAL SUBSTANCES LISTS, AND EXPANDED UPON FROM COMPANY AND  
LITERATURE DATA.

RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 4

REACTIVITY = 3

78-

HMIS-RATINGS (SCALE 0 - 4)

HEALTH = 1

FIRE = 3

REACTIVITY = 3

-----4 FIRST AID MEASURES -----

GENERAL INFORMATION:

SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.

AFTER INHALATION:

SUPPLY FRESH AIR. IF REQUIRED, PROVIDE ARTIFICIAL RESPIRATION. KEEP PATIENT WARM. CONSULT DOCTOR IF SYMPTOMS PERSIST.

IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY IN SIDE POSITION FOR TRANSPORTATION.

AFTER SKIN CONTACT: IMMEDIATELY RINSE WITH WATER.

AFTER EYE CONTACT:

RINSE OPENED EYE FOR SEVERAL MINUTES UNDER RUNNING WATER. IF SYMPTOMS PERSIST, CONSULT A DOCTOR.

AFTER SWALLOWING: IF SYMPTOMS PERSIST CONSULT DOCTOR.

-----5 FIRE FIGHTING MEASURES -----

SUITABLE EXTINGUISHING AGENTS:

CO2, SAND, EXTINGUISHING POWDER. DO NOT USE WATER.

FOR SAFETY REASONS UNSUITABLE EXTINGUISHING AGENTS:

WITH FULL JET

PROTECTIVE EQUIPMENT: MOUNT RESPIRATORY PROTECTIVE DEVICE.

-----6 ACCIDENTAL RELEASE MEASURES -----

PERSON-RELATED SAFETY PRECAUTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.

MEASURES FOR ENVIRONMENTAL PROTECTION:

DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE.

INFORM RESPECTIVE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR SEWAGE SYSTEM.

DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

MEASURES FOR CLEANING/COLLECTING:

DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO ITEM 13.

ENSURE ADEQUATE VENTILATION.

DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS

-----7 HANDLING AND STORAGE -----

HANDLING:

INFORMATION FOR SAFE HANDLING:

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

HANDLE RECEPTACLE WITH CARE.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES:

KEEP IGNITION SOURCES AWAY - DO NOT SMOKE.

PROTECT AGAINST ELECTROSTATIC CHARGES.

KEEP RESPIRATORY PROTECTIVE DEVICE AVAILABLE.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C. I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.  
DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.

STORAGE:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:

STORE IN A COOL LOCATION.

OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED  
CONTAINERS.

INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY: NOT REQUIRED.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS:

KEEP RECEPTACLE TIGHTLY SEALED.

DO NOT GAS TIGHT SEAL RECEPTACLE.

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLES.

PROTECT FROM HEAT AND DIRECT SUNLIGHT.

-----8 EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS:

NO FURTHER DATA; SEE ITEM 7.

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

THE PRODUCT DOES NOT CONTAIN ANY RELEVANT QUANTITIES OF MATERIALS WITH  
CRITICAL VALUES THAT HAVE TO BE MONITORED AT THE WORKPLACE.

ADDITIONAL INFORMATION:

THE LISTS THAT WERE VALID DURING THE CREATION WERE USED AS BASIS.

PERSONAL PROTECTIVE EQUIPMENT:

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.

IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING.

WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.

STORE PROTECTIVE CLOTHING SEPARATELY.

AVOID CONTACT WITH THE EYES.

AVOID CONTACT WITH THE EYES AND SKIN.

BREATHING EQUIPMENT:

IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN

CASE OF INTENSIVE OR LONGER EXPOSURE USE RESPIRATORY PROTECTIVE DEVICE THAT

IS INDEPENDENT OF CIRCULATING AIR.

PROTECTION OF HANDS: PROTECTIVE GLOVES

EYE PROTECTION: TIGHTLY SEALED GOGGLES

-----9 PHYSICAL AND CHEMICAL PROPERTIES -----

FORM: AEROSOL

COLOR: ACCORDING TO PRODUCT SPECIFICATION

CHARACTERISTIC

IN CONDITION:

MELTING POINT/MELTING RANGE: UNDETERMINED

BOILING POINT/BOILING RANGE: -44 DEG. C (-47 DEG. F)

FLASH POINT: -19 DEG. C (-2 DEG. F)

IGNITION TEMPERATURE: 365.0 DEG. C (689 DEG. F)

AUTO IGNITING: PRODUCT IS NOT SELFIGNITING.

ANGER OF EXPLOSION:

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.

EXPLOSION LIMITS:

LOWER: 1.1 VOL %

UPPER: 13.0 VOL %

VAPOR PRESSURE AT 20 DEG. C (68 DEG. F): 8300.0 HPA

DENSITY: NOT DETERMINED.

SOLUBILITY IN/MISCIBILITY WITH WATER: NOT MISCIBLE OR DIFFICULT TO MIX.

SOLVENT CONTENT:

ORGANIC SOLVENTS: 0.0%

SOLIDS CONTENT: 21.2%

-----10 STABILITY AND REACTIVITY -----

THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED:

NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

DANGEROUS REACTIONS: NO DANGEROUS REACTIONS KNOWN.

US PRODUCTS OF DECOMPOSITION:

DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

-----11 TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRIMARY IRRITANT EFFECT:

ON THE SKIN: NO IRRITANT EFFECT.

ON THE EYE: IRRITATING EFFECT.

SENSITIZATION: NO SENSITIZING EFFECTS KNOWN.

ADDITIONAL TOXICOLOGICAL INFORMATION:

THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED

CALCULATION METHODS FOR PREPARATIONS:

HARMFUL.

IRRITANT.

CARCINOGENIC.

-----12 ECOLOGICAL INFORMATION -----

GENERAL NOTES:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER

DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM.

DANGER TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND.

-----13 DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT

PUNCTURE, INCINERATE, OR COMPACT. EMPTY CONTAINERS MUST BE HANDLED WITH CARE

DUE TO PRODUCT RESIDUE. DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR GAS TORCHES.

RECOMMENDATION:

MUST NOT BE DISPOSED OF TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM.

UNCLEANED PACKAGINGS:

RECOMMENDATION: DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

-----14 TRANSPORT INFORMATION -----

DOT REGULATIONS:

FLAMMABLE GAS - 2

HAZARD CLASS: 2.1

IDENTIFICATION NUMBER: UN1950

PACKING GROUP: -

PROPER SHIPPING NAME (TECHNICAL NAME):

AEROSOLS, FLAMMABLE, N.O.S., CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP I OR II, PROPANE

LAND TRANSPORT ADR/RID (CROSS-BORDER):

- TOXIC GAS)  
- FLAMMABLE GAS)

ADR/RID CLASS: 2 GASES

ITEM: 5 TF

DANGER CODE (KEMLER): -

UN-NUMBER: 1950

DESCRIPTION OF GOODS: 1950 AEROSOLS

MARITIME TRANSPORT IMDG:

(SYMBOL - TOXIC GAS - 6)  
(SYMBOL - FLAMMABLE GAS)

IMDG CLASS: 2

PAGE: 2102

UN NUMBER: 1950

PACKAGING GROUP: -

EMS NUMBER: 2-13

HEAVY: 310

POLLUTANT: NO

PROPER SHIPPING NAME: AEROSOLS

AIR TRANSPORT ICAO-TI AND IATA-DGR:  
(SYMBOL - FLAMMABLE GAS - 2)

ICAO/IATA CLASS: 2.1

ID NUMBER: 1950

PACKAGING GROUP: -

PROPER SHIPPING NAME:

AEROSOLS, FLAMMABLE, N.O.S. CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING  
GROUP I OR II, PROPANE

-----15 REGULATIONS -----

SARA:

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES):  
NONE OF THE INGREDIENT IS LISTED.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):  
NONE OF THE INGREDIENTS IS LISTED.

TSCA (TOXIC SUBSTANCES CONTROL ACT): NONE OF THE INGREDIENTS IS LISTED.

PROPOSITION 65:

CHEMICALS KNOWN TO CAUSE CANCER: NONE OF THE INGREDIENTS IS LISTED.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:  
NONE OF THE INGREDIENTS IS LISTED.

PRODUCT RELATED HAZARD INFORMATION:

THE PRODUCT HAS BEEN CLASSIFIED AND MARKED IN ACCORDANCE WITH DIRECTIVES ON  
HAZARDOUS MATERIALS.

HAZARD SYMBOLS:

TOXIC

EXTREMELY FLAMMABLE

HAZARD-DETERMINING COMPONENTS OF LABELLING:

SOLVENT-NAPHTHA (PETROLEUM), LIGHT AROM.

XYLENE (MIX)

RISK PHRASES:

MAY CAUSE CANCER.

EXTREMELY FLAMMABLE.

HAZARDOUS BY INHALATION AND IN CONTACT WITH SKIN.

IRRITATING TO EYES.

SAFETY PHRASES:

AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.

KEEP LOCKED UP AND OUT OF THE REACH OF CHILDREN.

DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY.

DO NOT EMPTY INTO DRAINS, DISPOSE OF THIS MATERIAL AND ITS CONTAINER AT

HAZARDOUS OR SPECIAL WASTE COLLECTION POINT

WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.

IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

LABELING OF CERTAIN PREPARATIONS:

OPACIFIED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO  
TEMPERATURES EXCEEDING 50 DEG. C, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR  
BURN, EVEN AFTER USE.

CONTAINS 78.4 MASS PERCENT OF INFLAMMABLE MATERIALS.

KEEP OUT OF THE REACH OF CHILDREN.

NATIONAL REGULATIONS:

HAZARD CLASS:

HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER.

-----16 OTHER INFORMATION -----

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT  
CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT  
ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

CONTACT: CRAIG SWAFFORD

ORDER: 1042570260 2XE42 - Paint Remover/Stripper Semi-Paste HAZMAT: 2XE42

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 2XE42  
MSDS # : A8447, B1005  
FREIGHT CODE : 0800  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER : ORM-D  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : Consumer Commodity ORM-D

LIMITED QUANTITY : YES  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!  
SHIPPING-PAPERS :

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

# ITEM: 2XE42 - Paint Remover/Stripper Semi-Paste

PICK REQ: 1042570260

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: B1005

**This MSDS should be attached or kept with the respective product with which it is associated.**

\*\*\*\*\*  
IAL SAFETY DATA SHEET - B1005

Associated Grainger Item: 2XE42 - Paint Remover/Stripper Semi-Paste

### MATERIAL SAFETY DATA SHEET

#### SECTION 1 GENERAL INFORMATION

MANUFACTURER:  
ZINSER COMPANY, INC.  
173 BELMONT DRIVE  
SOMERSET, NJ 08875  
(732) 469-8100

EMERGENCY TELEPHONE:  
CHEMTREC: (800) 424-9300

DATE: DECEMBER 1, 2006

PRODUCT NAME: PARKS POWER STRIPPER

CODES:  
001513  
001514  
001517  
001529

#### SECTION 2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS#	OSHA PEL	ACGIH TLV
METHYLENE CHLORIDE (DICHLORO METHANE)	75-09-2	25 PPM 125 PPM (STEL)	50 PPM
DIPROPYLENE GLYCOL- METHYL ETHER (GLYCOL ETHER)	34590-94-8	100 PPM	100 PPM 150 PPM (STEL)
TOLUENE (TOLUOL)	108-88-3	200 PPM 300 PPM (C)	50 PPM
METHANOL (METHYL ALCOHOL)	67-56-1	200 PPM	200 PPM 250 PPM (STEL)
MINERAL SPIRITS (PAINT THINNER)	64741-41-9	100 PPM	100 PPM
L ALCOHOL	64-17-5	1000 PPM	1000 PPM
CEILING VALUE			

#### SECTION 3 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:  
THIS PRODUCT IS A NONFLAMMABLE CLOUDY WHITE LIQUID WITH A CHLORINATED SOLVENT TYPE ODOR.

PRIMARY ROUTES OF EXPOSURE:  
SKIN CONTACT  
EYE CONTACT  
INHALATION

#### POTENTIAL ACUTE HEALTH EFFECTS:

EYE:  
EXPOSURE MAY CAUSE EYE IRRITATION. SYMPTOMS MAY INCLUDE STINGING, TEARING, AND REDNESS.

SKIN:  
EXPOSURE TO SKIN MAY CAUSE SKIN IRRITATION OR A BURNING SENSATION. PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN TO BECOME REDDENED, ROUGH AND DRY DUE TO THE REMOVAL OF NATURAL OILS AND MAY RESULT IN DERMATITIS.

INGESTION:  
SWALLOWING THIS MATERIAL MAY CAUSE GASTROINTESTINAL IRRITATION (NAUSEA, VOMITING, AND DIARRHEA) AND CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS). MAY CAUSE IRRITATION OF THE GASTROINTESTINAL TRACT WITH VOMITING. THIS MATERIAL MAY POSE AN ASPIRATION HAZARD. ASPIRATION OF THIS MATERIAL INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS, WHICH MAY BE FATAL.

INHALATION:  
EXCESSIVE INHALATION MAY PRODUCE SYMPTOMS OF CENTRAL NERVOUS SYSTEM DEPRESSION, RANGING FROM LIGHT HEADEDNESS, NAUSEA AND VOMITING TO UNCONSCIOUSNESS AND DEATH. INHALATION MAY CAUSE RESPIRATORY IRRITATION AND TRANSIENT PULMONARY EDEMA. EXCESSIVE INHALATION OR INGESTION MAY PRODUCE SYMPTOMS OF CENTRAL NERVOUS SYSTEM DEPRESSION RANGING FROM LIGHT-HEADEDNESS TO UNCONSCIOUSNESS AND DEATH. CAN CAUSE HEADACHE, MENTAL CONFUSION, DEPRESSION, FATIGUE, LOSS OF APPETITE, NAUSEA, VOMITING, COUGH, LOSS OF SENSE OF BALANCE, VISUAL DISTURBANCES AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS. PERSONS WITH ANGINA OR OTHER CARDIOVASCULAR DISEASES SHOULD NOT BE EXPOSED TO THIS PRODUCT

#### POTENTIAL CHRONIC HEALTH EFFECTS:

SIGNS AND SYMPTOMS:  
MAY CAUSE HEADACHE, MENTAL CONFUSION, DEPRESSION, FATIGUE, LOSS OF APPETITE, NAUSEA, VOMITING, COUGH, LOSS OF SENSE OF BALANCE AND VISUAL DISTURBANCES. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DERMATITIS.

(ALSO SECTIONS 4, 8, AND 11 FOR RELATED INFORMATION)

#### SECTION 4 FIRST AID MEASURES

EYE CONTACT:  
IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES

\*\*\*\*\*  
HOLDING EYELIDS APART TO ENSURE FLUSHING OF THE ENTIRE EYE SURFACE. GET MEDICAL ATTENTION.

SKIN CONTACT:  
WASH CONTAMINATED AREAS WITH PLENTY OF SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND FOOTWEAR AND WASH CLOTHING BEFORE REUSE. DISCARD FOOTWEAR, WHICH CANNOT BE DECONTAMINATED. SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

INGESTION:  
IF SWALLOWED CONTACT A PHYSICIAN, POISON CONTROL CENTER, OR HOSPITAL EMERGENCY ROOM. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. THIS MATERIAL MAY POSE AN ASPIRATION HAZARD. ASPIRATION OF THIS MATERIAL INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS, WHICH MAY BE FATAL. IF SPONTANEOUS VOMITING OCCURS, MONITOR BREATHING FOR DIFFICULTY. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION. IF THE PATIENT IS CONSCIOUS, WASH OUT MOUTH WITH WATER AND GIVE 200 -300 ML (HALF A PINT) OF WATER TO DRINK.

INHALATION:  
REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, HAVE TRAINED PERSON ADMINISTER OXYGEN. IF BREATHING HAS STOPPED, GIVE MOUTH-TO-MOUTH RESUSCITATION. GET IMMEDIATE MEDICAL ATTENTION.

#### SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT (METHOD): NO FLASH (UP TO B.P.).

EXTINGUISHING MEDIA: FOAM, DRY CHEMICAL, WATER FOG, CO2

PROTECTION OF FIREFIGHTERS:  
AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS IN PRESSURE DEMAND MODE AND FULL PROTECTIVE GEAR.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

CLEAN UP METHODS:  
FLUSH SPILLED MATERIAL INTO SUITABLE RETAINING AREAS OR CONTAINERS WITH LARGE QUANTITIES OF WATER OR CAN BE TAKEN ON SAND, EARTH, CLAY, FLOOR ABSORBENT AND SHOVELED INTO CONTAINERS FOR DISPOSAL. WEAR PROTECTIVE CLOTHES AND SELF-BREATHING APPARATUS. PREVENT RUNOFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. AVOID SPARKS OR OTHER FLAME TO PREVENT THERMAL DECOMPOSITION.

(SEE ALSO SECTION 8 FOR INFORMATION ON EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT)

#### SECTION 7 HANDLING AND STORAGE

HANDLING:  
DO NOT USE PRESSURE TO EMPTY CONTAINERS. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL. VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW PLACES, SUCH AS PITS OR DISGREASERS OR OTHER POORLY VENTILATED AREAS. DO NOT ENTER PLACES WHERE VAPORS ARE SUSPECTED UNLESS SPECIAL RESPIRATOR PROTECTION IS WORN AND AN OBSERVER IS PRESENT.

STORAGE:  
STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.

#### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:  
USE IN WELL-VENTILATED AREAS. IF NECESSARY, USE MECHANICAL LOCAL EXHAUST VENTILATION OR GENERAL ROOM DILUTION VENTILATION TO REDUCE VAPOR CONCENTRATIONS BELOW APPLICABLE EXPOSURE LIMITS.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE PROTECTION:  
PREVENT EYE CONTACT. WEAR CHEMICAL SPLASH GOGGLES OR SIMILAR EYE PROTECTION IF THE POTENTIAL EXISTS FOR EYE CONTACT.

SKIN PROTECTION:  
AVOID UNNECESSARY SKIN CONTACT. IT IS RECOMMENDED THAT RUBBER GLOVES BE WORN TO PREVENT SKIN CONTACT. DEPENDING ON CONDITIONS OF USE ADDITIONAL PROTECTIVE EQUIPMENT MAY BE NECESSARY SUCH AS FACE-SHIELD, APRON OR COVERALLS.

RESPIRATORY PROTECTION:  
NONE REQUIRED FOR NORMALLY EXPECTED USE CONDITIONS. IF EXPOSURE LIMITS ARE EXCEEDED OR IF IRRITATION IS EXPERIENCED, APPROPRIATE NIOSH APPROVED RESPIRATORY PROTECTION SHOULD BE WORN.

GENERAL HYGIENE PRACTICES:  
WASH AFTER HANDLING MATERIAL. PREVENT EYE CONTACT. AVOID PROLONGED SKIN AND INHALATION CONTACT. WASH THOROUGHLY BEFORE HANDLING FOOD, COSMETICS, OR BEFORE SMOKING.

#### SECTION 9 PHYSICAL DATA

APPEARANCE: CLOUDY WHITE

ODOR: CHLORINATED SOLVENT

PHYSICAL STATE: LIQUID

pH: N/D

BOILING POINT: 150 DEG. F

MELTING POINT: N/D

VAPOR PRESSURE: 300 MMHg 20 DEG. C

VAPOR DENSITY: HEAVIER  
VISCOSITY: N/D  
SOLUBILITY IN WATER: LIMITED  
SPECIFIC GRAVITY (WATER = 1): 1.18

#### SECTION 10 STABILITY AND REACTIVITY

STABILITY: STABLE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS:  
COMBUSTION MAY YIELD CARBON MONOXIDE, CARBON DIOXIDE, PHOSGENE AND/OR HCL.  
DO NOT BREATHE SMOKE OR FUMES. WEAR APPROPRIATE PROTECTIVE EQUIPMENT

CONDITIONS TO AVOID:  
OPEN FLAMES, WELDING ARCS OR OTHER HIGH TEMPERATURE SOURCES.

INCOMPATIBILITY:  
AVOID CONTACT WITH OXYGEN, NITROGEN, PEROXIDE, OXIDIZERS AND REACTIVE METALS (I.E., ALUMINUM, POTASSIUM, SODIUM, ETC.).

#### SECTION 11 TOXICOLOGICAL INFORMATION

CARCINOGENICITY:  
THE FOLLOWING INGREDIENTS ARE PRESENT AT GREATER THAN 0.1% AND ARE CLASSIFIED BY IARC, NTP, OR OSHA AS CARCINOGENIC:

INGREDIENT	CAS #	IARC	NTP	OSHA
METHYLENE CHLORIDE	75-09-2	YES	YES	YES

METHYLENE CHLORIDE:  
A 1986 NTP, 2-YEAR ANIMAL INHALATION STUDY REPORT STATES THAT THERE IS "CLEAR EVIDENCE OF CARCINOGENICITY" IN MICE (LUNG AND LIVER TUMORS) AND FEMALE RATS (MAMMARY TUMORS). NTP LIST METHYLENE CHLORIDE AS REASONABLE ANTICIPATED TO BE A HUMAN CARCINOGEN. IARC LISTS METHYLENE CHLORIDE AS A GROUP 2B CARCINOGEN (HAVING INADEQUATE EVIDENCE IN HUMANS AND SUFFICIENT EVIDENCE IN ANIMALS TO EVALUATE CARCINOGENICITY).

(SEE ALSO SECTION 15 FOR RELATED INFORMATION)

#### SECTION 12 ECOLOGICAL INFORMATION

CHEMICAL FATE AND EFFECTS: NONE KNOWN

#### SECTION 13 DISPOSAL CONSIDERATIONS

RECOMMENDED WASTE DISPOSAL METHOD:  
THIS MATERIAL, WHEN DISCARDED OR DISPOSED OF, COULD BE A HAZARDOUS WASTE ACCORDING TO FEDERAL REGULATIONS (40 CFR 261) DUE TO THE CHARACTERISTIC OF INSTABILITY (D001). THE TRANSPORTATION, STORAGE, TREATMENT, AND DISPOSAL OF THIS WASTE MUST BE CONDUCTED IN COMPLIANCE WITH 40 CFR 262, 263, 264, AND 270. DISPOSAL CAN ONLY OCCUR IN PROPERLY PERMITTED FACILITIES.  
STATE AND LOCAL REGULATIONS FOR ANY ADDITIONAL REQUIREMENTS AS THESE MAY BE MORE RESTRICTIVE THAN FEDERAL LAWS AND REGULATIONS. CHEMICAL ADDITIONS, PROCESSING OR OTHERWISE ALTERING THIS MATERIAL MAY MAKE THE WASTE MANAGEMENT INFORMATION PRESENTED IN THIS MSDS INCOMPLETE, INACCURATE, OR OTHERWISE INAPPROPRIATE.

#### SECTION 14 TRANSPORTATION INFORMATION

REGULATED BY THE DOT: YES

DOT PROPER SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

#### SECTION 15 REGULATORY INFORMATION

CERCLA:  
THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT OF 1980 (CERCLA) REQUIRES NOTIFICATION TO THE NATIONAL RESPONSE CENTER FOR RELEASES OF QUANTITIES OF HAZARDOUS SUBSTANCES EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITIES (RQS) IN 40 CFR 302.4 (FOR CERCLA 102).

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

CHEMICAL NAME	CAS#	MAXIMUM CONCENTRATION (WT. %)
METHYLENE CHLORIDE (DICHLORO METHANE)	75-09-2	N/A
TOLUENE (TOLUOL)	108-88-3	N/A
METHANOL (METHYL ALCOHOL)	67-56-1	N/A

SARA TITLE III, SECTION 311/312:  
THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III REQUIRES EMERGENCY PLANNING BASED ON THRESHOLD PLANNING QUANTITIES (TPQS) AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQS) IN 40 CFR 355 (USED FOR SARA 302, 304, 311 AND 312).

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

CHEMICAL NAME	CAS#	MAXIMUM CONCENTRATION (WT. %)
	N/A	N/A

SARA TITLE III, SECTION 313:  
THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III REQUIRES SUBMISSION OF ANNUAL REPORTS OF RELEASE OF TOXIC CHEMICALS THAT ARE IN 40 CFR 372 (FOR SARA 313).

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

CHEMICAL NAME	CAS#	MAXIMUM CONCENTRATION (WT. %)
---------------	------	-------------------------------

METHYLENE CHLORIDE (DICHLORO METHANE)	75-09-2	N/A
TOLUENE (TOLUOL)	108-88-3	N/A
METHANOL (METHYL ALCOHOL)	67-56-1	N/A

TSCA:  
THE COMPONENTS OF THIS MIXTURE ARE LISTED IN THE TOXIC SUBSTANCE CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES.

THIS PRODUCT DOES CONTAIN CHEMICALS THAT REQUIRE EXPORT NOTIFICATION UNDER SECTION 12(B) OF THE TSCA REGULATION:

CHEMICAL NAME	CAS#	MAXIMUM CONCENTRATION (WT. %)
DIPROPYLENE GLYCOL-METHYL ETHER (GLYCOL ETHER)	N230	N/A

#### SECTION 16 OTHER INFORMATION

LEGEND:

N/A: NOT APPLICABLE  
N/D: NOT DETERMINED  
N/E: NOT ESTABLISHED  
N/R: NOT REQUIRED  
CPS: CENTIPOISE  
KU: KREBS UNITS  
STEL: SHORT TERM EXPOSURE LIMIT  
C: OSHA CEILING VALUE  
PPM: PARTS PER MILLION  
PPB: PARTS PER BILLION  
PEL: PERMISSIBLE EXPOSURE LIMIT  
TLV: THRESHOLD LIMIT VALUE  
TWA: TIME WEIGHTED AVERAGE  
MG/M3: MILLIGRAMS PER CUBIC METER  
MPPCF: MILLION PARTICLES PER CUBIC FOOT OF AIR.  
ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS  
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (US DEPT. OF LABOR)  
RCRA: RESOURCE CONSERVATION AND RECOVERY ACT  
SARA: SUPERFUND AMENDMENT AND REAUTHORIZATION ACT  
TSCA: TOXIC SUBSTANCE CONTROL ACT  
FHSA: FEDERAL HAZARDOUS SUBSTANCE ACT

PREPARED BY:  
ZINSSER HEALTH AND SAFETY MANAGER  
REGULATORY COMPLIANCE DEPT.  
173 BELMONT DRIVE  
SOMERSET, NJ 08875  
(732) 469-8100

DISCLAIMER:  
ZINSSER CO., INC. BELIEVES, TO THE BEST OF ITS KNOWLEDGE, INFORMATION AND BELIEF, THE INFORMATION CONTAINED HEREIN TO BE ACCURATE AND RELIABLE AS OF THE DATE OF THIS MATERIAL SAFETY DATA SHEET. HOWEVER, BECAUSE THE CONDITIONS OF HANDLING, USE, AND STORAGE OF THESE MATERIALS ARE BEYOND OUR CONTROL, WE ASSUME NO RESPONSIBILITY OR LIABILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE INCURRED BY THE USE OF THESE MATERIALS AND MAKE NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OR RELIABILITY OF THE DATA OR RESULTS OBTAINED FROM THEIR USE. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND SHOULD BE USED WITH CAUTION. THE INFORMATION AND RECOMMENDATIONS IN THIS MATERIAL SAFETY DATA SHEET ARE OFFERED FOR THE USERS' CONSIDERATION AND EXAMINATION. IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE FINAL SUITABILITY OF THIS INFORMATION AND DATA AND TO COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

EST.: ESTIMATED

759304  
07/12/00

M A T E R I A L   S A F E T Y   D A T A   S H E E T

PRODUCT NAME: POLYCOAT H.S. EN NEUTRAL BASE  
PRODUCT CODE: 759304

HMIS CODES: H F R P  
2 3 0 H

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: RODDA PAINT COMPANY  
ADDRESS : 12000 SW Garden Place  
Tigard, OR 97223

EMERGENCY PHONE : (800) 424-9300  
INFORMATION PHONE : (503) 521-4300

DATE PRINTED 07/12/00  
NAME OF PREPARER : Rick Barnard

==== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-63	70 20C	10 - 20
NONE ESTABLISHED			
N-BUTYL ACETATE	123-86-4		0 - 10
OSHA: TLV 150.0 PPM			
METHYL N-AMYL KETONE	110 43 0	2.8 68 F	0 - 10
ACGIH THRESHOLD LIMIT VALUE: 50 ppm TWA			
OSHA PEL (Permissible Exposure Limit) 100 ppm TWA			
METHYL NORMAL AMYL KETONE	110-43-0	2.14 20C	0 - 10
OSHA TWA- 100ppm 465mg/m3			
NIOSH TWA- 100ppm 465mg/m3			
ACGIH TWA- 50ppm 233mg/m3			
*># TOLUENE	108-88-3	22 20C	0 - 10
OSHA TWA- 200ppm Ceiling- 300ppm (OHSA PEL Table Z-2: Acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift: 500ppm/10 minutes)			
NIOSH TWA- 100ppm 375mg/m3 STEL- 150ppm 560mg/m3			
ACGIH TWA- 50ppm 188mg/m3			
HYDRATED AMORPHOUS SILICA			0 - 10
*# XYLENE	1330-20-7	5.1 20 C	0 - 10
OSHA TWA- 100ppm 435mg/m3			
NIOSH TWA- 100ppm 435mg/m3 STEL- 150ppm 655mg/m3			
ACGIH TWA- 100ppm 434mg/m3 STEL- 150ppm 651mg/m3			
PETROLEUM HYDROCARBONS	TRADE SECRET		0 - 10
NONE AVAILABLE			
# ETHYLBENZENE	100-41-4	10 20 C	0 - 10
OSHA TWA- 100ppm 435mg/m3			
NIOSH TWA- 100ppm 435mg/m3 STEL- 125ppm 545mg/m3			
ACGIH TWA- 100ppm 434mg/m3 STEL- 125ppm 543mg/m3			

\* Indicates toxic material(s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372.  
This product is believed not to contain materials listed as carcinogens by NTP, IARC, or OSHA.  
The above chemical(s) meet the criteria as defined under 29 CFR 1910 for toxic and hazardous substances.

> Indicates material(s) listed on California's Proposition 65 known to the state to cause reproductive toxicity or cancer.

# Indicates materials listed in Section 112(b) of the Clean Air Act.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 230.7F - 304 F                      SPECIFIC GRAVITY (H2O=1): 1.01  
VAPOR DENSITY: Heavier than air.                  EVAPORATION RATE: Faster than Butyl Acetate.  
COATING V.O.C.: 3.69 lb/gl                      MATERIAL V.O.C.: 3.69 lb/gl  
SOLUBILITY IN WATER: None  
APPEARANCE AND ODOR: White liquid, solvent odor.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 40F                                      METHOD USED: TCT  
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.0                  UPPER: 7.9

EXTINGUISHING MEDIA: CO2, dry chemical, foam, or water spray for large fires.

SPECIAL FIREFIGHTING PROCEDURES:

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode to protect against the hazardous effects of normal products of combustion or oxygen deficiency.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (just residue) can ignite EXPLOSIVELY! Thermal decomposition of this product will produce carbon monoxide and carbon dioxide.

===== SECTION V - REACTIVITY DATA =====

STABILITY: | X | Stable      |      | Unstable

CONDITIONS TO AVOID

Excessive temperatures. Avoid all heat sparks and sources of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID)

Water, amines, strong bases, alcohol, metal compounds, and surface active metals.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Carbon dioxide, carbon monoxide, oxides of nitrogen, HCN, HDI.

HAZARDOUS POLYMERIZATION: | X | May occur      |      | Will not occur

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Use only with adequate ventilation. Do not breathe dust or spray mist. Ensure fresh air entry during application and drying. For spray application, sanding, abrading, and dust cleanup, wear an appropriate properly fitted respirator (NIOSH/MSHA TC21C approved). Follow respirator manufacturer's directions for respirator use.

If affected, remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

#### SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Contact with skin can cause irritation. Symptoms include: reddening, swelling, rash, scaling or blistering. Contact with eyes can cause irritation and pain. Symptoms of exposure include: tearing, reddening and swelling accompanied by a stinging sensation. Chronic eye contact may result in corneal opacity.

#### SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Prolonged exposure limit may result in the absorption of harmful amounts of material.

#### INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract. Do not induce vomiting if swallowed. Give 1 to 2 cups milk or water to drink, then consult a physician.

#### HEALTH HAZARDS (ACUTE AND CHRONIC)

Acute inhalation: irritates the mucous membranes in the respiratory tract, causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function.

Chronic inhalation: repeated overexposures will result in chemical asthma, with symptoms which include; chest tightness, wheezing, cough, and shortness of breath.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: Yes  
This material is not listed as a human carcinogenic.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Aggravated by exposure: asthma and other respiratory disorders, skin allergies, and eczema.

#### EMERGENCY AND FIRST AID PROCEDURES

SKIN- Wash exposed area with soap and water. EYES- Flush with large amounts of water.

### ===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources (flares, flames including pilot lights and electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up had been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up with sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Prevent run-off sewers, streams, or other bodies of water.

#### WASTE DISPOSAL METHOD

Destroy by liquid incineration. Material collected on absorbent material may be deposited in an approved toxic substance landfill in accordance with local, state, and federal regulations.

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in a cool, dry area. Keep away from heat, sparks, and open flame. Keep containers closed when not in use. Use only with adequate ventilation.

#### OTHER PRECAUTIONS

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this data sheet must be observed. READ AND OBSERVE ALL PRECAUTIONS ON LABEL!

#### ===== SECTION VIII - CONTROL MEASURES =====

##### RESPIRATORY PROTECTION:

If TLV of the product or any component is exceeded, a NIOSH/MESA jointly approved self-contained breathing apparatus with a full face piece operated in pressure demand or other positive pressure mode is advised; however, OSHA regulations also permit other NIOSH/MESA respirators under specified conditions. (See your safety equipment supplier).

##### VENTILATION:

Provide sufficient mechanical and/or local exhaust to maintain exposure below TLV(s).

##### PROTECTIVE GLOVES:

Wear resistant gloves such as: BUNA-N

##### EYE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised, unless full facepiece respirator is worn.

##### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

##### WORK/HYGIENIC PRACTICES:

Wash hands thoroughly after handling this product.

#### ===== SECTION IX - DISCLAIMER =====

This information provided as a resource only. It should not be taken as a warranty or representation for which Rodda Paint Co. assumes legal responsibility. The information contained is believed to be accurate and compiled from sources believed to be reliable, it is the responsibility of the user to investigate and verify its validity. The user assumes all responsibility of using and handling the product in accordance with applicable federal, state, and local regulations.

32287  
07/11/00

M A T E R I A L   S A F E T Y   D A T A   S H E E T

PRODUCT NAME: POLYCOAT H.S. PART B  
PRODUCT CODE: 32287

HMIS CODES: H F R P  
2 3 0 H

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: RODDA PAINT COMPANY  
ADDRESS : 12000 SW Garden Place  
Tigard, OR 97223

EMERGENCY PHONE : (800) 424-9300      DATE PRINTED : 07/11/00  
INFORMATION PHONE : (503) 521-4300      NAME OF PREPARER : Rick Barnard

==== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION ====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
HOMOPOLYMER OF HDI	28182-81-2		80 - 90
The recommended Guideline Levels by the raw material vendor for HDI based Polyisocyanates is 0.5 mg/m3 TWA averaged over 8 hours and 1.0 mg/m3 Short Term Exposure STEL averaged over 15 minutes.			
N-BUTYL ACETATE	123-86-4		0 - 10
OSHA: TLV 150.0 PPM			
*# XYLENE	1330-20-7	5.1    20 C	0 - 10
OSHA TWA- 100ppm 435mg/m3			
NIOSH TWA- 100ppm 435mg/m3 STEL- 150ppm 655mg/m3			
ACGIH TWA- 100ppm 434mg/m3 STEL- 150ppm 651mg/m3			
*# ETHYLBENZENE	100-41-4	10    20 C	0 - 10
OSHA TWA- 100ppm 435mg/m3			
NIOSH TWA- 100ppm 435mg/m3 STEL- 125ppm 545mg/m3			
ACGIH TWA- 100ppm 434mg/m3 STEL- 125ppm 543mg/m3			

\* Indicates toxic material(s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372.

This product is believed not to contain materials listed as carcinogens by NTP, IARC, or OSHA.

The above chemical(s) meet the criteria as defined under 29 CFR 1910 for toxic and hazardous substances.

This product is believed not to contain materials listed on California's Proposition 65.

# Indicates materials listed in Section 112(b) of the Clean Air Act.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 276 F - 382F      SPECIFIC GRAVITY (H2O=1): 1.07  
VAPOR DENSITY: Heavier than air.      EVAPORATION RATE: Faster than Butyl Acetate.  
COATING V.O.C.: 1.79 lb/gl      MATERIAL V.O.C.: 1.79 lb/gl  
SOLUBILITY IN WATER: None  
APPEARANCE AND ODOR: Clear liquid, solvent odor.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 59 F

METHOD USED: TCC

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.0

UPPER: 7.0

EXTINGUISHING MEDIA: CO2, dry chemical, foam, or water spray for large fires.

SPECIAL FIREFIGHTING PROCEDURES:

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, HDI vapors and other irritating, highly toxic gasses may be generated by thermal decomposition or combustion. Closed container may explode when exposed to extreme heat or burst when contaminated with water (CO2 evolved).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (just residue) can ignite EXPLOSIVELY! Thermal decomposition of this product will produce carbon monoxide and carbon dioxide.

===== SECTION V - REACTIVITY DATA =====

STABILITY: | X | Stable | | Unstable

CONDITIONS TO AVOID

Excessive temperatures. Avoid all heat sparks and sources of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID)

Water, amines, strong bases, alcohol, metal compounds, and surface active metals.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Carbon dioxide, carbon monoxide, oxides of nitrogen, HCN, HDI.

HAZARDOUS POLYMERIZATION: | X | May occur | | Will not occur

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Acute Inhalation- HDI vapors or mist at concentrations above the TLV can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as an asthma attack. Exposure well above the TLV may lead to bronchitis, bronchial spasms and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms have also been reported.

Chronic Inhalation- As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. These symptoms, which include: chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for

several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent.

#### SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Acute Skin Contact- Isocyanates react with skin protein and moisture and can cause irritation. Symptoms of skin irritation may be reddening, swelling, rash, scaling or blistering. Some persons may develop skin sensitization from skin contact. Cured material is difficult to remove.

Chronic Skin Contact- Prolonged contact with the isocyanate can cause reddening, swelling, rash, scaling or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor-only exposure.

Acute Eye Contact- Liquid, aerosols and vapors of this product are irritation and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Chronic Eye Contact- May result in corneal opacity (clouding of the eye surface).

#### SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Prolonged exposure limit may result in the absorption of harmful amounts of material.

#### INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract. Do not induce vomiting if swallowed. Give 1 to 2 cups milk or water to drink, then consult a physician.

#### HEALTH HAZARDS (ACUTE AND CHRONIC)

Acute inhalation: irritates the mucous membranes in the respiratory tract, causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function.

Chronic inhalation: repeated overexposures will result in chemical asthma, with symptoms which include; chest tightness, wheezing, cough, and shortness of breath.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: Yes  
This material is not listed as a human carcinogenic.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Aggravated by exposure: asthma and other respiratory disorders, skin allergies, and eczema.

#### EMERGENCY AND FIRST AID PROCEDURES

SKIN- Wash exposed area with soap and water. EYES- Flush with large amounts of water.

#### ===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

##### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources (flares, flames including pilot lights and electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up had been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up with sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Prevent run-off sewers, streams, or other bodies of water.

#### WASTE DISPOSAL METHOD

Destroy by liquid incineration. Material collected on absorbent material may be deposited in an approved toxic substance landfill in accordance with local, state, and federal regulations.

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. At maximum storage temperatures noted, material may slowly polymerize without hazard. Ideal storage temperature range for ease of handling is 50-81 F (10-27 C). Avoid contact with skin and eyes. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard.

#### OTHER PRECAUTIONS

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this data sheet must be observed. READ AND OBSERVE ALL PRECAUTIONS ON LABEL!

### ===== SECTION VIII - CONTROL MEASURES =====

#### RESPIRATORY PROTECTION:

If TLV of the product or any component is exceeded, a NIOSH/MESA jointly approved self-contained breathing apparatus with a full face piece operated in pressure demand or other positive pressure mode is advised; however, OSHA regulations also permit other NIOSH/MESA respirators under specified conditions. (See your safety equipment supplier).

#### VENTILATION:

Provide sufficient mechanical and/or local exhaust to maintain exposure below TLV(s).

#### PROTECTIVE GLOVES:

Wear resistant gloves such as: BUNA-N

#### EYE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised, unless full facepiece respirator is worn.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

#### WORK/HYGIENIC PRACTICES:

Wash hands thoroughly after handling this product.

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## ITEM: 6KP13 - Paint Spray Banner Red

PICK REQ: 1037325023

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A8809

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A8809

Associated Grainger Item: 6KP13 - Paint Spray Banner Red

6KP19, 6KP21, 6KP22, 6KP25, 6KP27, 6KP28, 6KP29, 6KP31, 6YH15

MATERIAL SAFETY DATA SHEET

24 HOUR ASSISTANCE:

1-847-357-7700

RUST-OLEUM CORP.

WWW.RUSTOLEUM.COM

## SECTION 1 - CHEMICAL PRODUCT / COMPANY INFORMATION

PRODUCT NAME: N INDUSTRIAL CHOICE AEROSOLS

IDENTIFICATION NUMBER:

N1622830, N1624830, N1626830, N1633830, N1638830, N1643830, N1644830, N1653830, N1664830, N1666830, N1671830, N1674830, N1676830, N1678830, N1679830, N1684830, N1686830, N1688830, N1690830, N1692830, N1696830

PRODUCT USE/CLASS: TOPCOATS/AEROSOL

SUPPLIER:

RUST-OLEUM CORPORATION

11 HAWTHORN PARKWAY

VERNON HILLS, IL 60061

USA

MANUFACTURER:

RUST-OLEUM CORPORATION

11 HAWTHORN PARKWAY

VERNON HILLS, IL 60061

USA

PREPARER: REGULATORY DEPARTMENT

REVISION DATE: 01/24/2006

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WEIGHT % LESS THAN
ACETONE	67-64-1	35.0
LIQUEFIED PETROLEUM GAS	68476-86-8	30.0
XYLENE	1330-20-7	20.0
TOLUENE	108-88-3	20.0
ALIPHATIC PETROLEUM DISTILLATES	64742-89-8	20.0
TITANIUM DIOXIDE	13463-67-7	15.0
NAPHTHA	8032-32-4	10.0
ETHYLBENZENE	100-41-4	10.0
AROMATIC HYDROCARBON	64742-95-6	5.0
MAGNESIUM SILICATE	14807-96-6	5.0
1,2,4-TRIMETHYLBENZENE	95-63-6	5.0
AROMATIC SOLVENT	64742-95-6	5.0
STODDARD SOLVENTS	8052-41-3	5.0
ALIPHATIC HYDROCARBON	64742-89-8	5.0
PIGMENT YELLOW 73	13515-40-7	5.0
PIGMENT BLACK 7	1333-86-4	5.0
PIGMENT YELLOW 17	4531-49-1	5.0
1,3,5-TRIMETHYLBENZENE	108-67-8	5.0
PIGMENT VIOLET 32	12225-08-0	0.1

CHEMICAL NAME	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
ACETONE	500 PPM	750 PPM	750 PPM	N.E.
LIQUEFIED PETROLEUM GAS	1000 PPM	N.E.	1000 PPM	N.E.
XYLENE	100 PPM	150 PPM	100 PPM	N.E.
TOLUENE	50 PPM	150 PPM	200 PPM	300 PPM
ALIPHATIC PETROLEUM DISTILLATES	400 PPM	N.E.	400 PPM	N.E.
TITANIUM DIOXIDE	10 MG/M3	N.E.	10 MG/M3	N.E.
ACETONE	300 PPM	N.E.	N.E.	N.E.
ETHYLBENZENE	100 PPM	125 PPM	100 PPM	N.E.
AROMATIC HYDROCARBON	N.E.	N.E.	N.E.	N.E.
MAGNESIUM SILICATE	10 MG/M3	N.E.	15 MG/M3	N.E.
1,2,4-TRIMETHYLBENZENE	25 PPM	N.E.	N.E.	N.E.

AROMATIC SOLVENT	N.E.	N.E.	N.E.	N.E.
STODDARD SOLVENTS	100 PPM	N.E.	500 PPM	N.E.
ALIPHATIC HYDROCARBON	300 PPM	N.E.	300 PPM	N.E.
PIGMENT YELLOW 73	2 MG/M3	N.E.	2 MG/M3	N.E.
PIGMENT BLACK 7	3.5 MG/M3	N.E.	3.5 MG/M3	N.E.
PIGMENT YELLOW 17	2 MG/M3	N.E.	5 MG/M3	N.E.
1,3,5-TRIMETHYLBENZENE	25 PPM	N.E.	N.E.	N.E.
PIGMENT VIOLET 32	N.E.	N.E.	N.E.	N.E.

## SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CONTENTS UNDER PRESSURE. VAPORS MAY CAUSE FLASH FIRE OR EXPLOSION. EXTREMELY FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT:

PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN IRRITATION. SUBSTANCE MAY CAUSE SLIGHT SKIN IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION:

HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES, NOSE, THROAT AND LUNGS. AVOID BREATHING VAPORS OR MISTS. HIGH GAS, VAPOR, MIST OR DUST CONCENTRATIONS MAY BE HARMFUL IF INHALED. HARMFUL IF INHALED.

EFFECTS OF OVEREXPOSURE - INGESTION:

ASPIRATION HAZARD IF SWALLOWED; CAN ENTER LUNGS AND CAUSE DAMAGE. SUBSTANCE MAY BE HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:

IARC LISTS ETHYLBENZENE AS A POSSIBLE HUMAN CARCINOGEN (GROUP 2B). MAY CAUSE CENTRAL NERVOUS SYSTEM DISORDER (E.G., NARCOSIS INVOLVING A LOSS OF COORDINATION, WEAKNESS, FATIGUE, MENTAL CONFUSION, AND BLURRED VISION) AND/OR DAMAGE. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. OVEREXPOSURE TO XYLENE IN LABORATORY ANIMALS HAS BEEN ASSOCIATED WITH LIVER ABNORMALITIES, KIDNEY, LUNG, SPLEEN, EYE AND BLOOD DAMAGE AS WELL AS REPRODUCTIVE DISORDERS. EFFECTS IN HUMANS, DUE TO CHRONIC OVEREXPOSURE, HAVE INCLUDED LIVER, CARDIAC ABNORMALITIES AND NERVOUS SYSTEM DAMAGE. OVEREXPOSURE TO TOLUENE IN LABORATORY ANIMALS HAS BEEN ASSOCIATED WITH LIVER ABNORMALITIES, KIDNEY, LUNG AND SPLEEN DAMAGE. EFFECTS IN HUMANS HAVE INCLUDED LIVER AND CARDIAC ABNORMALITIES.

CONTAINS CARBON BLACK. CHRONIC INFLAMMATION, LUNG FIBROSIS, AND LUNG TUMORS HAVE BEEN OBSERVED IN SOME RATS EXPERIMENTALLY EXPOSED FOR LONG PERIODS OF TIME TO EXCESSIVE CONCENTRATIONS OF CARBON BLACK AND SEVERAL INSOLUBLE FINE DUST PARTICLES. TUMORS HAVE NOT BEEN OBSERVED IN OTHER ANIMAL SPECIES (I.E., MOUSE AND HAMSTER) UNDER SIMILAR CIRCUMSTANCES AND STUDY CONDITIONS. EPIDEMIOLOGICAL STUDIES OF NORTH AMERICAN WORKERS SHOW NO EVIDENCE OF CLINICALLY SIGNIFICANT ADVERSE HEALTH EFFECTS DUE TO OCCUPATIONAL EXPOSURE TO CARBON BLACK.

CARBON BLACK IS LISTED AS A GROUP 2B-"POSSIBLY CARCINOGENIC TO HUMANS" BY IARC AND IS PROPOSED TO BE LISTED AS A4 - "NOT CLASSIFIED AS A HUMAN CARCINOGEN" BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS. SIGNIFICANT EXPOSURE IS NOT ANTICIPATED DURING BRUSH APPLICATION OR DRYING. RISK OF OVEREXPOSURE DEPENDS ON DURATION AND LEVEL OF EXPOSURE TO DUST FROM REPEATED SANDING OF SURFACES OR SPRAY MIST AND THE ACTUAL CONCENTRATION OF CARBON BLACK IN THE FORMULA.

PRIMARY ROUTE(S) OF ENTRY:

SKIN CONTACT, SKIN ABSORPTION, INHALATION, EYE CONTACT

## SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT:

HOLD EYELIDS APART AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

FIRST AID - SKIN CONTACT:

WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

FIRST AID - INHALATION:

IF YOU EXPERIENCE DIFFICULTY IN BREATHING, LEAVE THE AREA TO OBTAIN FRESH AIR. IF CONTINUED DIFFICULTY IS EXPERIENCED, GET MEDICAL ASSISTANCE IMMEDIATELY.

FIRST AID - INGESTION:

ASPIRATION HAZARD:  
DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH BECAUSE THIS MATERIAL CAN ENTER THE LUNGS AND CAUSE SEVERE LUNG DAMAGE. GET IMMEDIATE MEDICAL ATTENTION.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -156 F (SETAFLASH)

LOWER EXPLOSIVE LIMIT: 0.7%

UPPER EXPLOSIVE LIMIT: 12.8%

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

WATER SPRAY MAY BE INEFFECTIVE. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR. FLASH POINT IS LESS THAN 20 DEG. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! PERFORATION OF THE PRESSURIZED CONTAINER MAY CAUSE BURSTING OF THE CAN. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. VAPORS CAN

TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. KEEP CONTAINERS TIGHTLY CLOSED.

SPECIAL FIREFIGHTING PROCEDURES:  
EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:  
IF SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIALS AS SAND/ST. REMOVE ALL SOURCES OF IGNITION, VENTILATE AREA AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS. DISPOSE OF ACCORDING TO LOCAL, STATE (PROVINCIAL) AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

#### SECTION 7 - HANDLING AND STORAGE

HANDLING:  
WASH HANDS BEFORE EATING. WASH THOROUGHLY AFTER HANDLING. USE ONLY IN A WELL-VENTILATED AREA. AVOID BREATHING VAPOR OR MIST. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED BECAUSE IT MAY RETAIN PRODUCT RESIDUES.

STORAGE:  
DO NOT STORE ABOVE 120 DEG. F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS I FLAMMABLE LIQUIDS. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CONTENTS UNDER PRESSURE. DO NOT EXPOSE TO HEAT OR STORE ABOVE 120 DEG. F.

#### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:  
USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. USE EXPLOSION-PROOF VENTILATION EQUIPMENT. PREVENT BUILD-UP OF VAPORS BY OPENING ALL DOORS AND WINDOWS TO ACHIEVE CROSS-VENTILATION.

RESPIRATORY PROTECTION:  
A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. A NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE OR CANISTER MAY BE PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES WHERE AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS.

PROTECTION PROVIDED BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION.

SKIN PROTECTION:  
NITRILE OR NEOPRENE GLOVES MAY AFFORD ADEQUATE SKIN PROTECTION. USE IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT AND ABSORPTION OF THIS MATERIAL THROUGH THE SKIN.

PROTECTION:  
SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:  
REFER TO SAFETY SUPERVISOR OR INDUSTRIAL HYGIENIST FOR FURTHER INFORMATION REGARDING PERSONAL PROTECTIVE EQUIPMENT AND ITS APPLICATION.

HYGIENIC PRACTICES:  
WASH THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: -34 - 900 F

VAPOR DENSITY: HEAVIER THAN AIR

ODOR: SOLVENT LIKE

ODOR THRESHOLD: ND

APPEARANCE: LIQUID

EVAPORATION RATE: SLOWER THAN EITHER

SOLUBILITY IN H2O: SLIGHT

FREEZE POINT: ND

SPECIFIC GRAVITY:

VAPOR PRESSURE:

pH: NE

PHYSICAL STATE: LIQUID

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

#### SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:  
AVOID TEMPERATURES ABOVE 120 DEG. F. AVOID ALL POSSIBLE SOURCES OF IGNITION.

INCOMPATIBILITY:  
INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS AND STRONG ALKALIS.

HAZARDOUS DECOMPOSITION:  
ON OPEN FLAME, CARBON MONOXIDE AND CARBON DIOXIDE. WHEN HEATED TO DECOMPOSITION, IT EMITS ACRID SMOKE AND IRRITATING FUMES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

#### SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50: ND

PRODUCT LC50: ND

CHEMICAL NAME	LD50	LC50
ACETONE	N.D.	N.D.
LIQUEFIED PETROLEUM GAS	N.D.	N.D.
XYLENE	N.D.	N.D.
TOLUENE	N.D.	N.D.
ALIPHATIC PETROLEUM DISTILLATES	N.D.	N.D.
TITANIUM DIOXIDE	>7500 MG/KG (ORAL, RAT)	N.D.
NAPHTHA	>5000 MG/KG (ORAL, RAT)	N.D.
ETHYLBENZENE	3500 MG/KG (ORAL, RAT)	N.D.
AROMATIC HYDROCARBON	N.D.	N.D.
MAGNESIUM SILICATE	N.D.	TCLO: 11 MG/M3 INH.
1,2,4-TRIMETHYLBENZENE	N.D.	18000 MG/M3 (RAT, 4 HR)
AROMATIC SOLVENT	4700 MG/KG (ORAL, RAT)	3670 MG/KG (INH, RAT)
STODDARD SOLVENTS	N.D.	N.D.
ALIPHATIC HYDROCARBON	N.D.	N.D.
PIGMENT YELLOW 73	N.D.	N.D.
PIGMENT BLACK 7	>8000 MG/KG (ORAL, RAT)	N.D.
PIGMENT YELLOW 17	N.D.	N.D.
1,3,5-TRIMETHYLBENZENE	1303 MG/KG (ORAL, RAT)	24 MG/M3 (RAT, 4HR)
PIGMENT VIOLET 32	>10000 MG/KG (ORAL, RAT)	N.D.

#### SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PRODUCT IS A MIXTURE OF LISTED COMPONENTS.

#### SECTION 13 - DISPOSAL INFORMATION

DISPOSAL INFORMATION:  
DISPOSE OF MATERIAL IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS AND ORDINANCES. DO NOT ALLOW TO ENTER STORM DRAINS OR SEWER SYSTEMS.

#### SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: AEROSOL

DOT TECHNICAL NAME:

DOT HAZARD CLASS: 2.1

DOT UN/NA NUMBER: UN1950

PACKING GROUP:

HAZARD SUBCLASS:

RESP. GUIDE PAGE: 126

#### SECTION 15 - REGULATORY INFORMATION

CERCLA - SARA HAZARD CATEGORY:  
THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:  
IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA SECTION 313:  
LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

CHEMICAL NAME	CAS NUMBER
XYLENE	1330-20-7
TOLUENE	108-88-3
ETHYLBENZENE	100-41-4
1,2,4-TRIMETHYLBENZENE	95-63-6

TOXIC SUBSTANCES CONTROL ACT:  
LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES: NONE KNOWN

U.S. STATE REGULATIONS: AS FOLLOWS

NEW JERSEY RIGHT-TO-KNOW:  
THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT.

CHEMICAL NAME	CAS NUMBER
POTASSIUM ALUMINOSILICATE	37244-96-5

PENNSYLVANIA RIGHT-TO-KNOW:  
THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT

GREATER THAN 3%.

CHEMICAL NAME	CAS NUMBER
POTASSIUM ALUMINOSILICATE	37244-96-5
MODIFIED ALKYD	PROPRIETARY
MODIFIED ALKYD	PROPRIETARY
UM SULFATE	7727-43-7
CALCIUM CARBONATE	1317-65-3

CALIFORNIA PROPOSITION 65:

WARNING!  
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN BY THE STATE OF CALIFORNIA TO CAUSE CANCER.

WARNING!  
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

INTERNATIONAL REGULATIONS: AS FOLLOWS

CANADIAN WHMIS:  
THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR THE USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS:  
AB5  
D2A  
D2B

SECTION 16 - OTHER INFORMATION

HMIS RATINGS:  
HEALTH 2\*  
FLAMMABILITY 4  
REACTIVITY 0  
PERSONAL PROTECTION X

VOLATILE ORGANIC COMPOUNDS, G/L:

REASON FOR REVISION:

LEGEND:  
N.A. - NOT APPLICABLE  
N.E. - NOT ESTABLISHED  
N.D. - NOT DETERMINED

THE INFORMATION CONTAINED ON THIS MSDS HAS BEEN CHECKED AND SHOULD BE ACCURATE. HOWEVER, IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

ORDER: 1039125002 ITEM: 1F750 - Paint Safe Yellow 1 G

HAZMAT: 1F750

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 1F750  
MSDS # : A7504, B0432  
FREIGHT CODE : 0213  
DOT PROPER SHIP NAME : COMBUSTIBLE LIQUID, NOT REGULATED BY THE DOT AS A  
HAZARDOUS MATERIAL PER 49CFR 173.150(F)(2),  
FLASHPOINT 40 DGS C, 104

FLASHPOINT : 40 DEGREES CELSIUS, 104 DEGREES FAHRENHEIT

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER :  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL :

LIMITED QUANTITY : NO  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!! ONLY ARROW UP  
LABEL (2S594) REQUIRED.

SHIPPING-PAPERS :

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

\*\*\*\*\*

## ITEM: 1F750 - Paint Safe Yellow 1 G

PICK REQ: 1039125002

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: B0432

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*  
SERIAL SAFETY DATA SHEET - B0432

Associated Grainger Item: 1F750 - Paint Safe Yellow 1 G

1F722, 1F738, 1F754, 1F732, 1F742, 1F730, 1F728

MATERIAL SAFETY DATA SHEET

RUST-OLEUM CORP.

24 HOUR ASSISTANCE: 1-847-367-7700

WWW.RUSTOLEUM.COM

## SECTION 1 - CHEMICAL PRODUCT / COMPANY INFORMATION

PRODUCT NAME:  
HIGH PERFORMANCE INDUSTRIAL ENAMEL  
LOW VOC TOPCOATS

IDENTIFICATION NUMBER:

3423402, 3425402, 3427402, 3433402, 3438402, 3444402, 3445402, 3446402,  
3455402, 3456402, 3464402, 3465402, 3470402, 3471402, 3477402, 3478402,  
3479300, 3479402, 3482402, 3486402, 3492300, 3492402

PRODUCT USE/CLASS: TOPCOATS/LOW VOC ALKYL

SUPPLIER:  
RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USAMANUFACTURER:  
RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USA

PREPARER: REGULATORY DEPARTMENT

REVISION DATE: 11/21/2006

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME CAS NUMBER WEIGHT % LESS THAN

STODDARD SOLVENTS 8052-41-3 40.0

TITANIUM DIOXIDE 13463-67-7 20.0

TREMOLITE (NONASBESTIFORM) 14567-73-8 20.0

MAGNESIUM SILICATE 14807-96-6 15.0

SERPENTINE 12135-86-3 15.0

PIGMENT YELLOW 74 6358-31-2 10.0

PIGMENT ORANGE 5 3468-63-1 5.0

PIGMENT YELLOW 73 13515-10-7 5.0

PIGMENT BLACK 7 1333-86-4 5.0

ANTHOPHYLITE (NONASBESTIFORM) 17068-78-9 5.0

XYLENE 1330-20-7 5.0

CHEMICAL NAME ACGIH ACGIH OSHA OSHA PEL- PEL-  
TLV-TWA TLV-STEL PEL-TWA CEILING

STODDARD SOLVENTS 100 PPM N.E. 500 PPM N.E.

TITANIUM DIOXIDE 10 MG/M3 N.E. 10 MG/M3 N.E.

TREMOLITE (NONASBESTIFORM) N.E. N.E. N.E. N.E.

MAGNESIUM SILICATE 10 MG/M3 N.E. 15 MG/M3 N.E.

SERPENTINE N.E. N.E. N.E. N.E.

PIGMENT YELLOW 74 N.E. N.E. N.E. N.E.

PIGMENT ORANGE 5 2 MG/M3 N.E. 5 MG/M3 N.E.

PIGMENT YELLOW 73 2 MG/M3 N.E. 2 MG/M3 N.E.

PIGMENT BLACK 7 3.5 MG/M3 N.E. 3.5 MG/M3 N.E.

ANTHOPHYLITE (NONASBESTIFORM) N.E. N.E. N.E. N.E.

XYLENE 100 PPM 150 PPM 100 PPM N.E.

## SECTION 3 - HAZARDS IDENTIFICATION

HAZARD OVERVIEW:

IF INHALED, MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING  
DROWSINESS, HEADACHE OR NAUSEA. HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.  
CAUSES IRRITATING TO EYES AND RESPIRATORY TRACT. SUSPECT CANCER HAZARD.  
COMBUSTIBLE LIQUID AND VAPOR.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: MAY CAUSE SKIN IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION:

HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES, NOSE, THROAT AND  
LUNGS. MAY CAUSE HEADACHES AND DIZZINESS. HARMFUL IF INHALED.

EFFECTS OF OVEREXPOSURE - INGESTION:

ASPIRATION HAZARD IF SWALLOWED; CAN ENTER LUNGS AND CAUSE DAMAGE. SUBSTANCE  
MAY BE HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:

SUSPECT CANCER HAZARD-CONTAINS MATERIAL WHICH MAY CAUSE CANCER. REPORTS HAVE  
ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH  
PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. OVEREXPOSURE TO XYLENE IN  
LABORATORY ANIMALS HAS BEEN ASSOCIATED WITH LIVER ABNORMALITIES, KIDNEY,  
LUNG, SPLEEN, EYE AND BLOOD DAMAGE AS WELL AS REPRODUCTIVE DISORDERS.  
EFFECTS IN HUMANS, DUE TO CHRONIC OVEREXPOSURE, HAVE INCLUDED LIVER, CARDIAC  
ABNORMALITIES AND NERVOUS SYSTEM DAMAGE. CONTAINS CARBON BLACK. CHRONIC  
INFLAMMATION, LUNG FIBROSIS, AND LUNG TUMORS HAVE BEEN OBSERVED IN SOME RATS  
EXPERIMENTALLY EXPOSED FOR LONG PERIODS OF TIME TO EXCESSIVE CONCENTRATIONS  
OF CARBON BLACK AND SEVERAL INSOLUBLE FINE DUST PARTICLES. TUMORS HAVE NOT  
BEEN OBSERVED IN OTHER ANIMAL SPECIES (I.E., MOUSE AND HAMSTER) UNDER  
SIMILAR CIRCUMSTANCES AND STUDY CONDITIONS. EPIDEMIOLOGICAL STUDIES OF NORTH  
AMERICAN WORKERS SHOW NO EVIDENCE OF CLINICALLY SIGNIFICANT ADVERSE HEALTH  
EFFECTS DUE TO OCCUPATIONAL EXPOSURE TO CARBON BLACK.CARBON BLACK IS LISTED AS A GROUP 2B-"POSSIBLY CARCINOGENIC TO HUMANS" BY  
IARC AND IS PROPOSED TO BE LISTED AS A4- "NOT CLASSIFIED AS A HUMAN  
CARCINOGEN" BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL  
HYGIENISTS. SIGNIFICANT EXPOSURE IS NOT ANTICIPATED DURING BRUSH APPLICATION  
OR DRYING. RISK OF OVEREXPOSURE DEPENDS ON DURATION AND LEVEL OF EXPOSURE TO  
DUST FROM REPEATED SANDING OF SURFACES OR SPRAY MIST AND THE ACTUAL  
CONCENTRATION OF CARBON BLACK IN THE FORMULA.

PRIMARY ROUTE(S) OF ENTRY:

SKIN CONTACT, SKIN ABSORPTION, INHALATION, EYE CONTACT

## SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT:

HOLD EYELIDS APART AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.  
GET MEDICAL ATTENTION.

FIRST AID - SKIN CONTACT:

WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR  
PERSISTS.

FIRST AID - INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF  
BREATHING IS DIFFICULT, GIVE OXYGEN. GET IMMEDIATE MEDICAL ATTENTION.

FIRST AID - INGESTION:

ASPIRATION HAZARD:

DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH BECAUSE THIS MATERIAL CAN  
ENTER THE LUNGS AND CAUSE SEVERE LUNG DAMAGE. GET IMMEDIATE MEDICAL  
ATTENTION.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (SETAFLASH): 104 F

LOWER EXPLOSIVE LIMIT: 0.7%

UPPER EXPLOSIVE LIMIT: 22.0%

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: KEEP CONTAINERS TIGHTLY CLOSED.

SPECIAL FIREFIGHTING PROCEDURES:

EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE. WATER MAY BE USED TO COOL  
CLOSED CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE AUTOIGNITION OR  
EXPLOSION.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

CONTAIN SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIALS  
SUCH AS SAWDUST. DISPOSE OF ACCORDING TO LOCAL, STATE (PROVINCIAL) AND  
FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

## SECTION 7 - HANDLING AND STORAGE

HANDLING:

WASH HANDS BEFORE EATING. WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH  
EYES. AVOID BREATHING VAPOR OR MIST. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN  
AFTER CONTAINER IS EMPTIED BECAUSE IT MAY RETAIN PRODUCT RESIDUES.

STORAGE:

KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT,  
SPARKS AND OPEN FLAME. KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP AWAY FROM  
HEAT, SPARKS, FLAME AND SOURCES OF IGNITION.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

PREVENT BUILD-UP OF VAPORS BY OPENING ALL DOORS AND WINDOWS TO ACHIEVE  
CROSS-VENTILATION. USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR  
OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED  
EXPOSURE LIMITS.

RESPIRATORY PROTECTION:

A NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR WITH AN ORGANIC VAPOR  
CARTRIDGE OR CANISTER MAY BE PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES WHERE  
AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS.PROTECTION PROVIDED BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE  
PRESSURE AIR SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN

UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

SKIN PROTECTION:  
NITRILE OR NEOPRENE GLOVES MAY AFFORD ADEQUATE SKIN PROTECTION. USE IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT AND ABSORPTION OF THIS MATERIAL THROUGH THE SKIN.

PROTECTION:  
SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

OTHER PROTECTIVE EQUIPMENT:  
REFER TO SAFETY SUPERVISOR OR INDUSTRIAL HYGIENIST FOR FURTHER INFORMATION REGARDING PERSONAL PROTECTIVE EQUIPMENT AND ITS APPLICATION.

HYGIENIC PRACTICES:  
WASH THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: 212 - 900 F  
VAPOR DENSITY: HEAVIER THAN AIR  
ODOR: SOLVENT LIKE  
ODOR THRESHOLD: ND  
APPEARANCE: LIQUID  
EVAPORATION RATE: SLOWER THAN ETHER  
SOLUBILITY IN H2O: SLIGHT  
FREEZE POINT: ND  
SPECIFIC GRAVITY: 1.1000  
VAPOR PRESSURE:  
pH: NE  
PHYSICAL STATE: LIQUID  
(SEE SECTION 16 FOR ABBREVIATION LEGEND)

#### SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: AVOID ALL POSSIBLE SOURCES OF IGNITION.  
INCOMPATIBILITY:  
INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS AND STRONG ALKALIES.  
HAZARDOUS DECOMPOSITION:  
WHEN HEATED TO DECOMPOSITION, IT EMITS ACRID SMOKE AND IRRITATING FUMES. BY FLAME, CARBON MONOXIDE AND CARBON DIOXIDE.  
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.  
STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

#### SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50: ND  
PRODUCT LC50: ND

CHEMICAL NAME	LD50	LC50
STODDARD SOLVENTS	N.D.	N.D.
TITANIUM DIOXIDE	>7500 MG/KG (ORAL, RAT)	N.D.
TREMOLITE (NONASBESTIFORM)	N.D.	N.D.
MAGNESIUM SILICATE	N.D.	TCLO:11 MG/M3 INH.
SERPENTINE	N.D.	N.D.
PIGMENT YELLOW 74	>15000 MG/KG (ORAL, RAT)	N.D.
PIGMENT ORANGE 5	N.D.	N.D.
PIGMENT YELLOW 73	N.D.	N.D.
PIGMENT BLACK 7	>8000 MG/KG (ORAL, RAT)	N.D.
ANTHOPHYLITE (NONASBESTIFORM)	N.D.	N.D.
XYLENE	N.D.	N.D.

#### SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PRODUCT IS A MIXTURE OF LISTED COMPONENTS.

#### SECTION 13 - DISPOSAL INFORMATION

DISPOSAL INFORMATION:  
DISPOSE OF MATERIAL IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS AND ORDINANCES. DO NOT ALLOW TO ENTER STORM DRAINS OR SEWER SYSTEMS.

#### SECTION 14 - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: PAINT  
JT TECHNICAL NAME:  
DOT HAZARD CLASS: 3  
DOT UN/NA NUMBER: UN1263  
PACKING GROUP: III  
HAZARD SUBCLASS:  
RESP. GUIDE PAGE: 128

#### SECTION 15 - REGULATORY INFORMATION

CERCLA - SARA HAZARD CATEGORY:

THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:  
IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA SECTION 313:

LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

CHEMICAL NAME	CAS NUMBER
---------------	------------

XYLENE	1330-20-7
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TOXIC SUBSTANCES CONTROL ACT:

LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES:  
NONE KNOWN

U.S. STATE REGULATIONS: AS FOLLOWS

NEW JERSEY RIGHT-TO-KNOW:  
THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT.

CHEMICAL NAME	CAS NUMBER
---------------	------------

TALL OIL ALKYD RESIN	PROPRIETARY
----------------------	-------------

ALKYD RESIN	PROPRIETARY
-------------	-------------

PENNSYLVANIA RIGHT-TO-KNOW:

THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%.

CHEMICAL NAME	CAS NUMBER
---------------	------------

TALL OIL ALKYD RESIN	PROPRIETARY
----------------------	-------------

ALKYD RESIN	PROPRIETARY
-------------	-------------

PIGMENT RED 3	2425-85-6
---------------	-----------

CALCIUM CARBONATE	1317-65-3
-------------------	-----------

YELLOW IRON OXIDE	51274-00-1
-------------------	------------

ALKYD RESIN	PROPRIETARY
-------------	-------------

RED IRON OXIDE	1332-37-2
----------------	-----------

PIGMENT RED 170	2786-76-7
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PIGMENT ORANGE 34	15793-73-4
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CALIFORNIA PROPOSITION 65:

WARNING!

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN BY THE STATE OF CALIFORNIA TO CAUSE CANCER.

THESE PRODUCTS CONTAIN NO KNOWN CHEMICALS KNOWN BY THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

INTERNATIONAL REGULATIONS: AS FOLLOWS

CANADIAN WHMIS:

THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR THE USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: B3, D2B

#### SECTION 16 - OTHER INFORMATION

HMIS RATINGS:

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
PERSONAL PROTECTION	X

VOLATILE ORGANIC COMPOUNDS, G/L: 340 MAX

REASON FOR REVISION:

LEGEND:

N.A. - NOT APPLICABLE  
N.E. - NOT ESTABLISHED  
N.D. - NOT DETERMINED

THE INFORMATION CONTAINED ON THIS MSDS HAS BEEN CHECKED AND SHOULD BE ACCURATE. HOWEVER, IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

ORDER: 10391250023JR74 - Paint Thinner Specific Application HAZMAT: 3JR74

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 3JR74  
MSDS # : A9312  
FREIGHT CODE : 0505  
DOT PROPER SHIP NAME : ACETONE

FLASHPOINT : -20 DEGREES CELSIUS, -4 DEGREES FAHRENHEIT

UPS RESTRICTIONS : DO NOT SHIP UPS.

HAZARDOUS CLASS NUMBER : 3  
UN ID # : UN1090  
PACKING GROUP : II  
SHIPPING LABEL : FLAMMABLE LIQUID

LIMITED QUANTITY : NO  
CARTON INSTRUCTIONS : MUST SHIP IN ORIGINAL SHIPPACK ONLY  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!! SHIPPING LABEL  
IS FLAMMABLE LIQUID. IF YOU OVERPACK, YOU MUST USE  
THE 2S045 "OVERPACK" LABEL.

SHIPPING-PAPERS :

HAZARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE  
ERG# 127

\*\*\*\*\*

# ITEM: 3JR74 - Paint Thinner Specific Application

PICK REQ: 1039125002

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A9312

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A9312

Associated Grainger Item: 3JR74 - Paint Thinner Specific Application

MATERIAL SAFETY DATA SHEET

24 HOUR ASSISTANCE: 1-847-367-7700

RUST-OLEUM CORP.

WWW.RUSTOLEUM.COM

## SECTION 1 - CHEMICAL PRODUCT/COMPANY INFORMATION

PRODUCT NAME: RUST-OLEUM THINNER - 333

IDENTIFICATION NUMBER: 333402

PRODUCT USE/CLASS: THINNER

SUPPLIER:  
RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USA

MANUFACTURER:  
RUST-OLEUM CORPORATION  
11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
USA

REVISION DATE: 02/27/2006

PREPARER: REGULATORY DEPARTMENT

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WEIGHT %	ACGIH LESS THAN	ACGIH TLV-TWA	OSHA TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
ACETONE	67-64-1	100.0	500 PPM	750 PPM	750 PPM	N.E.	

## SECTION 3 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

FLAMMABLE LIQUID AND VAPOR. HIGH VAPOR CONCENTRATIONS CAN IRRITATE EYES, AND RESPIRATORY PASSAGES. CAUSES NOSE AND THROAT IRRITATION. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT:  
PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION:  
HARMFUL IF INHALED. HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES; NOSE, THROAT AND LUNGS. MAY CAUSE HEADACHES AND DIZZINESS. AVOID BREATHING VAPORS OR MISTS.

EFFECTS OF OVEREXPOSURE - INGESTION:  
ASPIRATION HAZARD IF SWALLOWED; CAN ENTER LUNGS AND CAUSE DAMAGE. HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:  
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

PRIMARY ROUTE(S) OF ENTRY:  
SKIN CONTACT, SKIN ABSORPTION, INHALATION, EYE CONTACT

## SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT:  
HOLD EYELIDS APART AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

FIRST AID - SKIN CONTACT:  
WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

FIRST AID - INHALATION:  
REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET IMMEDIATE MEDICAL ATTENTION.

FIRST AID - INGESTION:  
ASPIRATION HAZARD:  
DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH BECAUSE THIS MATERIAL CAN ENTER THE LUNGS AND CAUSE SEVERE LUNG DAMAGE. GET IMMEDIATE MEDICAL ATTENTION.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (SETAFLASH): -4 F

EXPLOSIVE LIMIT: 2.6%  
EXPLOSIVE LIMIT: 12.8%

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK.

### SPECIAL FIREFIGHTING PROCEDURES:

EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE AUTOIGNITION OR EXPLOSION.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:  
CONTAIN SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIALS SUCH AS SAWDUST. ELIMINATE ALL IGNITION SOURCES; USE EXPLOSION-PROOF EQUIPMENT. PLACE MATERIAL IN A CONTAINER AND DISPOSE OF ACCORDING TO LOCAL, PROVINCIAL, STATE AND FEDERAL REGULATIONS.

## SECTION 7 - HANDLING AND STORAGE

### HANDLING:

WASH HANDS BEFORE EATING. FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED BECAUSE IT MAY RETAIN PRODUCT RESIDUES. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

### STORAGE:

KEEP AWAY FROM HEAT, SPARKS, FLAME AND SOURCES OF IGNITION. KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS:

USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. PREVENT BUILD-UP OF VAPORS BY OPENING ALL DOORS AND WINDOWS TO ACHIEVE CROSS-VENTILATION.

### RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA 1910.134 AND ANSI Z89.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. A NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE OR CANISTER MAY BE PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES WHERE AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS. PROTECTION PROVIDED BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION.

### SKIN PROTECTION:

NITRILE OR NEOPRENE GLOVES MAY AFFORD ADEQUATE SKIN PROTECTION. USE IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT AND ABSORPTION OF THIS MATERIAL THROUGH THE SKIN.

### EYE PROTECTION:

USE SAFETY EYEWEAR DESIGNED TO PROTECT AGAINST SPLASH OF LIQUIDS.

### OTHER PROTECTIVE EQUIPMENT:

REFER TO SAFETY SUPERVISOR OR INDUSTRIAL HYGIENIST FOR FURTHER INFORMATION REGARDING PERSONAL PROTECTIVE EQUIPMENT AND ITS APPLICATION.

### HYGIENIC PRACTICES:

WASH THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: 69-133 F

VAPOR DENSITY: HEAVIER THAN AIR

ODOR: SOLVENT LIKE

ODOR THRESHOLD: ND

APPEARANCE: LIQUID

EVAPORATION RATE: SLOWER THAN ETHER

SOLUBILITY IN H2O: SLIGHT

FREEZE POINT: ND

SPECIFIC GRAVITY: 0.8010

VAPOR PRESSURE:

PH: NE

PHYSICAL STATE: LIQUID

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

## SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: AVOID ALL POSSIBLE SOURCES OF IGNITION.

### INCOMPATIBILITY:

INCOMPATIBLE WITH STRONG OXIDIZING AGENTS, STRONG ACIDS AND STRONG ALKALIES.

### HAZARDOUS DECOMPOSITION:

WHEN HEATED TO DECOMPOSITION, IT EMITS ACRID SMOKE AND IRRITATING FUMES. BY OPEN FLAME, CARBON MONOXIDE AND CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

## SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50: ND  
PRODUCT LC50: ND

CHEMICAL NAME LD50 LC50

ACETONE N.D. N.D.

#### SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PRODUCT IS A MIXTURE OF LISTED COMPONENTS.

#### SECTION 13 - DISPOSAL INFORMATION

##### DISPOSAL INFORMATION:

DISPOSE OF MATERIAL IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS AND ORDINANCES. DO NOT ALLOW TO ENTER STORM DRAINS OR SEWER SYSTEMS.

#### SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: ACETONE

DOT TECHNICAL NAME: ACETONE

DOT HAZARD CLASS: 3

DOT UN/NA NUMBER: UN1090

PACKING GROUP: II

HAZARD SUBCLASS:

RESP. GUIDE PAGE: 127

#### SECTION 15 - REGULATORY INFORMATION

##### CERCLA - SARA HAZARD CATEGORY:

THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

IMMEDIATE HEALTH HAZARD

CHRONIC HEALTH HAZARD

FIRE HAZARD

##### SARA SECTION 313:

LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372: NONE KNOWN

##### TOXIC SUBSTANCES CONTROL ACT:

LISTED BELOW ARE THE SUBSTANCES (IF ANY) CONTAINED IN THIS PRODUCT THAT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES: NONE KNOWN

U.S. STATE REGULATIONS: AS FOLLOWS

##### NEW JERSEY RIGHT-TO-KNOW:

THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT.: NONE

##### PENNSYLVANIA RIGHT-TO-KNOW:

FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT A RATIO OF MORE THAN 3%.: NONE

##### CALIFORNIA PROPOSITION 65:

THESE PRODUCTS CONTAIN NO KNOWN CHEMICALS KNOWN BY THE STATE OF CALIFORNIA TO CAUSE CANCER. THESE PRODUCTS CONTAIN NO KNOWN CHEMICALS KNOWN BY THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

INTERNATIONAL REGULATIONS: AS FOLLOWS

##### CANADIAN WHMIS:

THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR THE USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

#### SECTION 16 - OTHER INFORMATION

##### HMS RATINGS:

HEALTH: 2\*

FLAMMABILITY: 4

REACTIVITY: 0

PERSONAL PROTECTION: X

VOLATILE ORGANIC COMPOUNDS, G/L: NA

REASON FOR REVISION:

##### LEGEND:

N.A. - NOT APPLICABLE

N.E. - NOT ESTABLISHED

N.D. - NOT DETERMINED

THE INFORMATION CONTAINED ON THIS MSDS HAS BEEN CHECKED AND SHOULD BE ACCURATE. HOWEVER, IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

ORDER: 1042570260

ITEM: 1D270 - Paint/Decal Remover

HAZMAT: 1D270

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 1D270  
MSDS # : A8264  
FREIGHT CODE : 0811  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D FLASHPOINT -18 DGS C, 0  
DGS F

FLASHPOINT : -18 DEGREES CELSIUS, 0 DEGREES FAHRENHEIT

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER : ORM-D  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : Consumer Commodity ORM-D

LIMITED QUANTITY : YES  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!  
SHIPPING-PAPERS :

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

## ITEM: 1D270 - Paint/Decal Remover

PICK REQ: 1042570260

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A8264

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*  
ORIGINAL SAFETY DATA SHEET - A8264

Associated Grainger Item: 1D270 - Paint/Decal Remover

## MATERIAL SAFETY DATA SHEET

S00615

01 00

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER: S00615

PRODUCT NAME: SPRAYON\* HEAVY DUTY PAINT REMOVER

HMIS CODES:

HEALTH 3\*  
FLAMMABILITY 4  
REACTIVITY 0MANUFACTURER'S NAME:  
THE SHERWIN-WILLIAMS COMPANY  
CONSUMER GROUP - INDUSTRIAL  
CLEVELAND, OH 44115

EMERGENCY TELEPHONE NO.: (216) 566-2917

INFORMATION TELEPHONE NO.: (800) 251-2486

DATE OF PREPARATION: 106-OCT-05

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

% BY WT	CAS NO.	INGREDIENT	UNITS	VAPOR PRESSURE
8	74-98-6	PROPANE ACGIH TLV: 2500 PPM OSHA PEL: 1000 PPM		760 MM
8	106-97-8	BUTANE ACGIH TLV: 800 PPM OSHA PEL: 800 PPM		760 MM
1	64742-88-7	MINERAL SPIRITS ACGIH TLV: 100 PPM OSHA PEL: 100 PPM		2 MM
	75-09-2	METHYLENE CHLORIDE ACGIH TLV: 50 PPM OSHA PEL: 25 PPM OSHA PEL: 125 PPM STEL		420 MM
9	67-63-0	2-PROPANOL ACGIH TLV: 400 PPM ACGIH TLV: 500 PPM STEL OSHA PEL: 400 PPM OSHA PEL: 500 PPM STEL		33 MM
1	141-43-5	ETHANOLAMINE ACGIH TLV: 3 PPM ACGIH TLV: 6 PPM STEL OSHA PEL: 3 PPM OSHA PEL: 6 PPM STEL		0.5 MM

## SECTION 3 - HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE:  
INHALATION OF VAPOR OR SPRAY MIST.  
EYE OR SKIN CONTACT WITH THE PRODUCT, VAPOR OR SPRAY MIST.

EFFECTS OF OVEREXPOSURE:

EYES: CAUSES BURNS.

SKIN: CAUSES BURNS.

INHALATION:  
IRRITATION OF THE UPPER RESPIRATORY SYSTEM.  
MAY CAUSE NERVOUS SYSTEM DEPRESSION. EXTREME OVEREXPOSURE MAY RESULT IN UNCONSCIOUSNESS AND POSSIBLY DEATH.

OVEREXPOSURE TO METHYLENE CHLORIDE CAN RAISE THE LEVEL OF CARBON MONOXIDE IN THE BLOOD.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:  
HEADACHE, DIZZINESS, NAUSEA, AND LOSS OF COORDINATION ARE INDICATIONS OF EXCESSIVE EXPOSURE TO VAPORS OR SPRAY MISTS.

REDNESS AND ITCHING OR BURNING SENSATION MAY INDICATE EYE OR EXCESSIVE SKIN EXPOSURE.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:  
CARDIOVASCULAR PROBLEMS MAY BE AGGRAVATED BY OVEREXPOSURE TO METHYLENE CHLORIDE.FOR INFORMATION:  
COMPLETE DISCUSSION OF TOXICOLOGY DATA REFER TO SECTION 11.

## SECTION 4 - FIRST AID MEASURES

EYES:  
FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.  
GET MEDICAL ATTENTION IMMEDIATELY.

SKIN:

\*\*\*\*\*  
WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER.  
IF IRRITATION PERSISTS OR OCCURS LATER, GET MEDICAL ATTENTION.  
REMOVE CONTAMINATED CLOTHING AND LAUNDRY BEFORE RE-USE.INHALATION:  
IF AFFECTED, REMOVE FROM EXPOSURE. RESTORE BREATHING.  
KEEP WARM AND QUIET.INGESTION:  
DO NOT INDUCE VOMITING.  
GET MEDICAL ATTENTION IMMEDIATELY.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: PROPELLANT &lt;0 F

LEL: 1.0  
UEL: 12.7

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT.  
APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS.

DURING EMERGENCY CONDITIONS OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:  
FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED.

WATER SPRAY MAY BE INEFFECTIVE. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
REMOVE ALL SOURCES OF IGNITION. VENTILATE THE AREA.  
REMOVE WITH INERT ABSORBENT.

## SECTION 7 - HANDLING AND STORAGE

STORAGE CATEGORY: NOT AVAILABLE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
KEEP AWAY FROM HEAT, SPARKS, AND OPEN-FLAME. VAPORS WILL ACCUMULATE READILY AND MAY IGNITE EXPLOSIVELY.DURING USE AND UNTIL ALL VAPORS ARE GONE:  
KEEP AREA VENTILATED - DO NOT SMOKE - EXTINGUISH ALL FLAMES, PILOT LIGHTS, AND HEATERS - TURN OFF STOVES, ELECTRIC TOOLS AND APPLIANCES, AND ANY OTHER SOURCES OF IGNITION.

CONSULT NFPA CODE. USE APPROVED BONDING AND GROUNDING PROCEDURES.

CONTENTS UNDER PRESSURE. DO NOT PUNCTURE, INCINERATE, OR EXPOSE TO TEMPERATURE ABOVE 120F. HEAT FROM SUNLIGHT, RADIATORS, STOVES, HOT WATER, AND OTHER HEAT SOURCES COULD CAUSE CONTAINER TO BURST.  
DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE:  
BEFORE INITIAL USE, CONSULT OSHA'S 'STANDARD FOR OCCUPATIONAL EXPOSURE TO METHYLENE CHLORIDE' (29 CFR 1910.1052).  
USE ONLY WITH ADEQUATE VENTILATION.DO NOT GET IN EYES OR ON SKIN. AVOID BREATHING VAPOR AND SPRAY MIST.  
WASH HANDS AFTER USING.VENTILATION:  
LOCAL EXHAUST PREFERABLE. GENERAL EXHAUST ACCEPTABLE IF THE EXPOSURE TO MATERIALS IN SECTION 2 IS MAINTAINED BELOW APPLICABLE EXPOSURE LIMITS. REFER TO OSHA STANDARDS 1910.94, 1910.107, 1910.108.RESPIRATORY PROTECTION:  
AN AIR SUPPLIED RESPIRATOR MUST BE WORN, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST CONCENTRATIONS ARE BELOW PERMISSIBLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.PROTECTIVE GLOVES:  
FOR INTERMITTENT EXPOSURE, WEAR VITON OR NITRILE GLOVES RECOMMENDED BY GLOVE MANUFACTURER FOR PROTECTION AGAINST MATERIALS IN SECTION 2.  
FOR IMMERSION, WEAR PVA GLOVES RECOMMENDED BY GLOVE MANUFACTURER.EYE PROTECTION:  
TO PREVENT EYE CONTACT, WEAR SAFETY SPECTACLES WITH UNPERFORATED SIDESHIELDS.

OTHER PROTECTIVE EQUIPMENT: USE BARRIER CREAM ON EXPOSED SKIN.

OTHER PRECAUTIONS:  
INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS CAN BE HARMFUL OR FATAL.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT:  
8.22 LB/GAL  
984 G/L

SPECIFIC GRAVITY: 0.99

- 4/12 -

BOILING POINT:  
<0 - 395 F  
<-18 - 201 C

MELTING POINT: NOT AVAILABLE

VOLATILE VOLUME: 98%

VAPORATION RATE: FASTER THAN ETHER

RELATIVE DENSITY: HEAVIER THAN AIR

SOLUBILITY IN WATER: N.A.

pH: 7.0

VOLATILE ORGANIC COMPOUNDS (VOC THEORETICAL):  
VOLATILE WEIGHT: 28.15 % LESS WATER AND FEDERALLY EXEMPT SOLVENTS

#### SECTION 10 - STABILITY AND REACTIVITY

STABILITY: STABLE

CONDITIONS TO AVOID: NONE KNOWN.

INCOMPATIBILITY: NONE KNOWN.

HAZARDOUS DECOMPOSITION PRODUCTS:  
BY FIRE: CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN CHLORIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

#### SECTION 11 - TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS:  
METHYLENE CHLORIDE IS LISTED BY IARC, NTP, AND OSHA. LABORATORY ANIMALS EXPOSED TO HIGH LEVELS OF METHYLENE CHLORIDE IN LIFETIME STUDIES HAVE DEVELOPED CANCER. THERE IS NO EVIDENCE TO DATE THAT METHYLENE CHLORIDE CAUSES CANCER IN HUMANS.

PROLONGED OVEREXPOSURE TO SOLVENT INGREDIENTS IN SECTION 2 MAY CAUSE ADVERSE EFFECTS TO THE LIVER, URINARY, CARDIOVASCULAR AND NERVOUS SYSTEMS.

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

TOXICOLOGY DATA:

CAS NO.	INGREDIENT NAME
74-98-6	PROPANE LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: NOT AVAILABLE
106-97-8	BUTANE LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: NOT AVAILABLE
2-88-7	MINERAL SPIRITS LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: NOT AVAILABLE
75-09-2	METHYLENE CHLORIDE LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: 1600 MG/KG
67-63-0	2-PROPANOL LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: 5045 MG/KG
141-43-5	ETHANOLAMINE LC50 RAT 4HR: NOT AVAILABLE LD50 RAT: 2140 MG/KG

#### SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: NO DATA AVAILABLE.

#### SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:  
WASTE FROM THIS PRODUCT MAY BE HAZARDOUS AS DEFINED UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) 40 CFR 261.

WASTE MUST BE TESTED FOR IGNITABILITY TO DETERMINE THE APPLICABLE EPA HAZARDOUS WASTE NUMBERS.

DO NOT INCINERATE. DEPRESSURIZE CONTAINER. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE/PROVINCIAL, AND LOCAL REGULATIONS REGARDING POLLUTION.

#### SECTION 14 - TRANSPORT INFORMATION

NO DATA AVAILABLE.

#### SECTION 15 - REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION:

CAS NO.	CHEMICAL/COMPOUND	% BY WT	% ELEMENT
75-09-2	METHYLENE CHLORIDE	67	

CALIFORNIA PROPOSITION 65:

WARNING:  
THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

TSCA CERTIFICATION:  
ALL CHEMICALS IN THIS PRODUCT ARE LISTED, OR ARE EXEMPT FROM LISTING, ON THE TSCA INVENTORY.

#### SECTION 16 - OTHER INFORMATION

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR.

THE ABOVE INFORMATION PERTAINS TO THIS PRODUCT AS CURRENTLY FORMULATED, AND IS BASED ON THE INFORMATION AVAILABLE AT THIS TIME. ADDITION OF REDUCERS OR OTHER ADDITIVES TO THIS PRODUCT MAY SUBSTANTIALLY ALTER THE COMPOSITION AND HAZARDS OF THE PRODUCT. SINCE CONDITIONS OF USE ARE OUTSIDE OUR CONTROL, WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND ASSUME NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION.

## ITEM: 2F934 - MARKER PAINT WHITE

PICK REQ: 1129482439

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A7342

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A7342

Associated Grainger Item: 2F934 - MARKER PAINT WHITE

## MATERIAL SAFETY DATA SHEET

BARNES DISTRIBUTION  
1301 E. 9TH STREET, #700  
CLEVELAND, OH 44114  
(800) 726-9626

MSDS FORM NO.: 19136

ITEM NO.:

## MATERIAL SAFETY DATA SHEET

VALVE ACTION PAINT MARKER

PART #: 19136

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS NAME: VALVE ACTION PAINT MARKER

PRODUCT CAS: (NONE)

PRODUCT CODE:

SYNONYMS: 19136; VALVE ACTION PAINT MARKER

COMPANY IDENTIFICATION:

NAME: LA-CO INDUSTRIES, INC. / MARKAL COMPANY

ADDRESS: 1201 PRATT BLVD.

ADDRESS:  
CITY: ELK GROVE VILLAGE  
STATE: IL  
ZIP: 60007-5746

FOR INFORMATION, CALL: 847-956-7600

EMERGENCY NUMBER: 800-424-9300

EMERGENCY AGENCY:  
NUMBER:

CREATION DATE: 4/21/2004

REVISED DATE:

## SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS	MIN	MAX
MINERAL SPIRITS	64742-88-7	30	50
VM&P NAPHTHA	8032-32-4	10	30
XYLENE	1330-20-7	5	10

## MISCELLANEOUS:

CHEMICAL	ACGIH TWA
VM&P	TWA 300 PPM (1370 MG/M3)
XYLENE	TWA 100 PPM STEL = 150 PPM

LBS OF VOC PER GALLON COATING (MINUS WATER): 0

COATING DENSITY (LBS/GAL): 0  
SOLVENT DENSITY (LBS/GAL): 0

PERCENT SOLVENT (VOLUME): 0  
PERCENT SOLIDS (VOLUME): 0  
PERCENT WATER (VOLUME): 0

## SECTION 3 - HAZARDS IDENTIFICATION

NFPA:  
HEALTH 3  
FIRE 2  
REACTIVITY 1  
OTHER

HMIS:  
HEALTH 3  
FIRE 1  
REACTIVITY 1  
SPECIAL PROTECTION

POTENTIAL HEALTH EFFECTS:

TARGET ORGANS: EYES, SKIN, INGESTION, INHALATION.

LIQUID AND VAPORS CAN IRRITATE EYES.

PRODUCE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY RESULT IN DEFATTING AND DRYING OF SKIN, WHICH MAY RESULT IN DERMATITIS.

INGESTION:  
PRODUCT IS RESUMED TO BE SLIGHTLY TOXIC. MAY CAUSE NERVOUS SYSTEM DEPRESSION. SMALL AMOUNTS OF LIQUID ASPIRATED IN TO THE LUNGS DURING

INGESTION OR FROM VOMITING MAY RESULT IN SEVERE LUNG DAMAGE.

INHALATION:  
MAY PRODUCE IRRITATION OF THE NOSE, THROAT, RESPIRATORY TRACT, AND MUCOUS MEMBRANES. HIGH CONCENTRATIONS OF VAPOR MAY PRODUCE CENTRAL NERVOUS SYSTEM DEPRESSION. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

## MISCELLANEOUS:

## SECTION 4 - FIRST AID MEASURES

EYE:  
IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. REMOVE CONTACT LENSES. GET MEDICAL ATTENTION.

SKIN:  
REMOVE CONTAMINATED CLOTHING. WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER OR WASH WITH SOAP AND WATER. CONSULT PHYSICIAN IF IRRITATION DEVELOPS.

INGESTION:  
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. DO NOT INDUCE VOMITING. IF VOMITING IS SPONTANEOUSLY OCCURS, KEEP THE VICTIM'S HEAD BELOW THE HIPS TO PREVENT ASPIRATION INTO THE LUNGS.

INHALATION:  
REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN:

## SECTION 5 - FIRE FIGHTING MEASURES

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN.

SPECIAL FIRE FIGHTING PROCEDURES:  
KEEP PERSONNEL REMOVED AND UPWIND OF ANY FIRE. WEAR FULL FIRE FIGHTING TURN-OUT GEAR (FULL BUNKER GEAR), AND RESPIRATORY PROTECTION (SCBA). CONTAINERS EXPOSED TO INTENSE HEAT SHOULD BE COOLED WITH WATER TO PREVENT PRESSURE BUILDUP, WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

EXTINGUISHING MEDIA: WATER FOG, FOAM, DRY CHEMICAL, CARBON DIOXIDE.

FLASH POINT: 73 DEG F/23 DEG C (SETFLASH)

FLAMMABLE LIMITS:  
LOWER LIMIT: N.D.  
UPPER LIMIT: N.D.

AUTOIGNITION TEMPERATURE:

GENERAL INFORMATION:

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

DISPOSAL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

SPILLS/LEAKS:  
TAKE UP SPILL WITH ABSORBENT MATERIAL AND PLACE IN AN NON-LEAKING CONTAINER. SEAL CONTAINER FOR PROPER DISPOSAL.

## SECTION 7 - HANDLING AND STORAGE

HANDLING:  
HANDLE AS A FLAMMABLE LIQUID. DO NOT DROP CONTAINER. READ ALL LABEL CAUTIONS. DO CUT, WELD, GRIND OR DRILL NEAR CONTAINERS.

STORAGE:  
STORE AWAY FROM IGNITION SOURCES, IN A COOL, WELL VENTILATED AREA. STORE AWAY FROM INCOMPATIBLE CHEMICALS.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS: LOCAL EXHAUST.

EYES: SAFETY GLASSES.

SKIN: USE IMPERVIOUS GLOVES.

CLOTHING: EYEWASH OR AND SAFETY SHOWER.

RESPIRATORS: USE A NIOSH/MSHA APPROVED BODY COVERING CLOTHING AS NEEDED.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: ORGANIC SOLVENT

pH: N.A.

VAPOR PRESSURE: 9.5 FOR XYLENE

VAPOR DENSITY: N.D.

EVAPORATION RATE: 0.75 FOR XYLENE

VISCOSITY: N.A.

BOILING POINT: 244 DEG F/118 DEG C FOR VM&amp;P NAPHTHA

FREEZING/MELTING POINT: N.A.

DECOMPOSITION TEMPERATURE: N.A.

SOLUBILITY:  
IN WATER: INSOLUBLE  
SPECIFIC GRAVITY: 1.1  
MOLECULAR FORMULA: N.A.  
MOLECULAR WEIGHT: N.A.

SYNOPSIS:

50% W/W  
-70% V/V

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE  
CONDITIONS TO AVOID: NONE.  
INCOMPATIBILITIES WITH OTHER MATERIALS: OXIDIZERS  
HAZARDOUS DECOMPOSITION PRODUCTS: N.D.  
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: NO DATA

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: NO DATA

SECTION 13 - OTHER PRECAUTIONS

OTHER PRECAUTIONS: NO DATA  
WORK/HYGIENIC PRACTICES: WASH HANDS AFTER USE.

SECTION 14 - TRANSPORT INFORMATION

TRANSPORTATION INFORMATION:  
D.O.T. US CONSUMER COMMODITY ORM-D (LESS THAN 30 KG GROSS PACKAGE WEIGHT)  
COMBUSTIBLE LIQUID, N.O.S. HAZARD CLASS 3, UN NO 1993, PACKING GROUP III  
(GREATER THAN 30 KG GROSS PACKAGE WEIGHT)  
TDG (CANADA) CONSUMER COMMODITY ORM-D (LESS THAN 30 KG GROSS PACKAGE WEIGHT)  
COMBUSTIBLE LIQUID, N.O.S. HAZARD CLASS 3, UN NO 1993, PACKAGING GROUP III  
(GREATER THAN 30 KG GROSS PACKAGE WEIGHT).

INTERNATIONAL MARITIME ORGANIZATION (IMO) EXEMPT (<.51/MARKER)  
INTERNATIONAL AIR TRANSPORT FLAMMABLE LIQUIDS N.O.S.  
UN NO 1993 ADR: UN 1263  
CLASS 3

31 DEG C  
RD IDENTIFICATION NO 30  
C TREM CARD IS NOT APPLICABLE  
D: NOT DETERMINED

RAILIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS:  
EROUS GOOD CLASS AND SUBSIDIARY RISK: NOT DETERMINED.

LABEL INFORMATION: NO DATA

SECTION 15 - REGULATORY INFORMATION

REGULATORY INFORMATION:  
APPEARS ON THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT  
ACT (PROP 65) SUBSTANCES LIST.  
APPEARS ON THE MASSACHUSETTS SUBSTANCES LIST.  
APPEARS ON THE NEW JERSEY RIGHT-TO-KNOW HAZARDOUS SUBSTANCE LIST.  
APPEARS ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST.  
APPEARS ON THE CANADIAN WHMIS INGREDIENTS DISCLOSURE LIST.

U.S.A.:  
OSHA HAZARD STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY THE U.S.  
OSHA HCS (29 CFR 1910.1200).

EPA SARA SEC 311/312 HAZARD CATEGORIES:  
IMMEDIATE (ACUTE) HEALTH HAZARD, FIRE HAZARD

TOXIC SUBSTANCES CONTROL ACT (TSCA) ALL INGREDIENTS CONTAINED IN THIS  
PRODUCT ARE LISTED ON THE U.S. EPA TSCA CHEMICAL SUBSTANCE INVENTORY.

CANADA:

WHMIS STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY CANADIAN WHMIS  
CONTROLLED PRODUCTS REGULATIONS

WHMIS RATING: D-1B, B-2

WHMIS PRECAUTIONARY STATEMENT: NONE REQUIRED.

E.U.:  
EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES:  
ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE LISTED ON THE EUROPEAN  
INVENTORY OF EXISTING CHEMICALS SUBSTANCES (EINECS). CATEGORIES OF DANGER  
LABELING INFORMATION: FLAMMABLE (F) HARMFUL (XN) RISK (R).

AUSTRALIA:  
WORKSAFE AUSTRALIA STATUS:  
THIS PRODUCT IS CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE  
AUSTRALIA.

SECTION 16 - ADDITIONAL INFORMATION

ADDITIONAL INFORMATION: NO DATA

## ITEM: 2F936 - MARKER PAINT YELLOW

PICK REQ: 1129482439

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A7342

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A7342

Associated Grainger Item: 2F936 - MARKER PAINT YELLOW

## MATERIAL SAFETY DATA SHEET

BARNES DISTRIBUTION  
1301 E. 9TH STREET, #700  
CLEVELAND, OH 44114  
(800) 726-9626

MSDS FORM NO.: 19136

ITEM NO.:

## MATERIAL SAFETY DATA SHEET

VALVE ACTION PAINT MARKER

PART #: 19136

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS NAME: VALVE ACTION PAINT MARKER

PRODUCT CAS: (NONE)

PRODUCT CODE:

SYNONYMS: 19136; VALVE ACTION PAINT MARKER

COMPANY IDENTIFICATION:

NAME: LA-CO INDUSTRIES, INC. / MARKAL COMPANY

ADDRESS: 1201 PRATT BLVD.

ADDRESS:  
CITY: ELK GROVE VILLAGE  
STATE: IL  
ZIP: 60007-5746

FOR INFORMATION, CALL: 847-956-7600

EMERGENCY NUMBER: 800-424-9300

EMERGENCY AGENCY:

NUMBER:

CREATION DATE: 4/21/2004

REVISED DATE:

## SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS	MIN	MAX
MINERAL SPIRITS	64742-88-7	30	50
VM&P NAPHTHA	8032-32-4	10	30
XYLENE	1330-20-7	5	10

## MISCELLANEOUS:

CHEMICAL	ACGIH TWA
VM&P	TWA 300 PPM (1370 MG/M3)
XYLENE	TWA 100 PPM STEL = 150 PPM

LBS OF VOC PER GALLON COATING (MINUS WATER): 0

COATING DENSITY (LBS/GAL): 0

SOLVENT DENSITY (LBS/GAL): 0

PERCENT SOLVENT (VOLUME): 0

PERCENT SOLIDS (VOLUME): 0

PERCENT WATER (VOLUME): 0

## SECTION 3 - HAZARDS IDENTIFICATION

NFPA:  
HEALTH 3  
FIRE 2  
REACTIVITY 1  
OTHER

HMS:  
HEALTH 3  
FIRE 1  
REACTIVITY 1  
SPECIAL PROTECTION

## POTENTIAL HEALTH EFFECTS:

TARGET ORGANS: EYES, SKIN, INGESTION, INHALATION.

LIQUID AND VAPORS CAN IRRITATE EYES.

PRODUCE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY RESULT IN OILY AND DRYING OF SKIN, WHICH MAY RESULT IN DERMATITIS.

INGESTION:  
PRODUCT IS RESUMED TO BE SLIGHTLY TOXIC. MAY CAUSE NERVOUS SYSTEM DEPRESSION. SMALL AMOUNTS OF LIQUID ASPIRATED INTO THE LUNGS DURING

INGESTION OR FROM VOMITING MAY RESULT IN SEVERE LUNG DAMAGE.

INHALATION:  
MAY PRODUCE IRRITATION OF THE NOSE, THROAT, RESPIRATORY TRACT, AND MUCOUS MEMBRANES. HIGH CONCENTRATIONS OF VAPOR MAY PRODUCE CENTRAL NERVOUS SYSTEM DEPRESSION. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

## MISCELLANEOUS:

## SECTION 4 - FIRST AID MEASURES

EYE:  
IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. REMOVE CONTACT LENSES. GET MEDICAL ATTENTION.

SKIN:  
REMOVE CONTAMINATED CLOTHING. WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER OR WASH WITH SOAP AND WATER. CONSULT PHYSICIAN IF IRRITATION DEVELOPS.

INGESTION:  
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. DO NOT INDUCE VOMITING. IF VOMITING IS SPONTANEOUSLY OCCURS, KEEP THE VICTIM'S HEAD BELOW THE HIPS TO PREVENT ASPIRATION INTO THE LUNGS.

INHALATION:  
REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN:

## SECTION 5 - FIRE FIGHTING MEASURES

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN.

SPECIAL FIREFIGHTING PROCEDURES:  
KEEP PERSONNEL REMOVED AND UPWIND OF ANY FIRE. WEAR FULL FIRE FIGHTING TURN-OUT GEAR (FULL BUNKER GEAR), AND RESPIRATORY PROTECTION (SCBA). CONTAINERS EXPOSED TO INTENSE HEAT SHOULD BE COOLED WITH WATER TO PREVENT PRESSURE BUILDUP, WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

EXTINGUISHING MEDIA: WATER FOG, FOAM, DRY CHEMICAL, CARBON DIOXIDE.

FLASH POINT: 73 DEG F/23 DEG C (SETFLASH)

FLAMMABLE LIMITS:  
LOWER LIMIT: N.D.  
UPPER LIMIT: N.D.

AUTOIGNITION TEMPERATURE:

GENERAL INFORMATION:

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

DISPOSAL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

SPILLS/LEAKS:  
TAKE UP SPILL WITH ABSORBENT MATERIAL AND PLACE IN AN NON-LEAKING CONTAINER. SEAL CONTAINER FOR PROPER DISPOSAL.

## SECTION 7 - HANDLING AND STORAGE

HANDLING:  
HANDLE AS A FLAMMABLE LIQUID. DO NOT DROP CONTAINER. READ ALL LABEL CAUTIONS. DO NOT CUT, WELD, GRIND OR DRILL NEAR CONTAINERS.

STORAGE:  
STORE AWAY FROM IGNITION SOURCES, IN A COOL, WELL VENTILATED AREA. STORE AWAY FROM INCOMPATIBLE CHEMICALS.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS: LOCAL EXHAUST.

EYES: SAFETY GLASSES.

SKIN: USE IMPERVIOUS GLOVES.

CLOTHING: EYEWASH OR AND SAFETY SHOWER.

RESPIRATORS: USE A NIOSH/MSHA APPROVED BODY COVERING CLOTHING AS NEEDED.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: ORGANIC SOLVENT

pH: N.A.

VAPOR PRESSURE: 9.5 FOR XYLENE

VAPOR DENSITY: N.D.

EVAPORATION RATE: 0.75 FOR XYLENE

VISCOSITY: N.A.

BOILING POINT: 244 DEG F/118 DEG C FOR VM&amp;P NAPHTHA

FREEZING/MELTING POINT: N.A.

DECOMPOSITION TEMPERATURE: N.A.

SOLUBILITY:  
IN WATER: INSOLUBLE  
SPECIFIC GRAVITY: 1.1  
MOLECULAR FORMULA: N.A.  
MOLECULAR WEIGHT: N.A.  
MISCELLANEOUS:

60% W/W  
4-70% V/V

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE  
CONDITIONS TO AVOID: NONE.  
INCOMPATIBILITIES WITH OTHER MATERIALS: OXIDIZERS  
HAZARDOUS DECOMPOSITION PRODUCTS: N.D.  
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: NO DATA

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: NO DATA

SECTION 13 - OTHER PRECAUTIONS

OTHER PRECAUTIONS: NO DATA  
WORK/HYGIENIC PRACTICES: WASH HANDS AFTER USE.

SECTION 14 - TRANSPORT INFORMATION

TRANSPORTATION INFORMATION:  
D.O.T. US CONSUMER COMMODITY ORM-D (LESS THAN 30 KG GROSS PACKAGE WEIGHT)  
COMBUSTIBLE LIQUID, N.O.S. HAZARD CLASS 3, UN NO 1993, PACKING GROUP III  
(GREATER THAN 30 KG GROSS PACKAGE WEIGHT)  
TDG (CANADA) CONSUMER COMMODITY ORM-D (LESS THAN 30 KG GROSS PACKAGE WEIGHT)  
COMBUSTIBLE LIQUID, N.O.S. HAZARD CLASS 3, UN NO 1993, PACKAGING GROUP III  
(GREATER THAN 30 KG GROSS PACKAGE WEIGHT).

INTERNATIONAL MARITIME ORGANIZATION (IMO) EXEMPT (<.51/MARKER)  
INTERNATIONAL AIR TRANSPORT FLAMMABLE LIQUIDS N.O.S.  
UN NO 1993 ADR: UN 1263

SS 3  
31 DEG C  
RD IDENTIFICATION NO 30  
C TREM CARD IS NOT APPLICABLE  
J: NOT DETERMINED

ITALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS:  
DANGEROUS GOOD CLASS AND SUBSIDIARY RISK: NOT DETERMINED.

LABEL INFORMATION: NO DATA

SECTION 15 - REGULATORY INFORMATION

REGULATORY INFORMATION:  
APPEARS ON THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT  
ACT (PROP 65) SUBSTANCES LIST.  
APPEARS ON THE MASSACHUSETTS SUBSTANCES LIST.  
APPEARS ON THE NEW JERSEY RIGHT-TO-KNOW HAZARDOUS SUBSTANCE LIST.  
APPEARS ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST.  
APPEARS ON THE CANADIAN WHMIS INGREDIENTS DISCLOSURE LIST.

U.S.A.:  
OSHA HAZARD STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY THE U.S.  
OSHA HCS (29 CFR 1910.1200).

EPA SARA SEC 311/312 HAZARD CATEGORIES:  
IMMEDIATE (ACUTE) HEALTH HAZARD, FIRE HAZARD

TOXIC SUBSTANCES CONTROL ACT (TSCA) ALL INGREDIENTS CONTAINED IN THIS  
PRODUCT ARE LISTED ON THE U.S. EPA TSCA CHEMICAL SUBSTANCE INVENTORY.

CANADA:

WHMIS STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY CANADIAN WHMIS  
CONTROLLED PRODUCTS REGULATIONS

WHMIS RATING: D-1B, B-2

WHMIS PRECAUTIONARY STATEMENT: NONE REQUIRED.

E.U.:  
EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES:  
ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE LISTED ON THE EUROPEAN  
INVENTORY OF EXISTING CHEMICALS SUBSTANCES (EINECS). CATEGORIES OF DANGER  
LABELING INFORMATION; FLAMMABLE (F) HARMFUL (XN) RISK (R).

AUSTRALIA:  
WORKSAFE AUSTRALIA STATUS:  
PRODUCT IS CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE  
AUSTRALIA.

SECTION 16 - ADDITIONAL INFORMATION

ADDITIONAL INFORMATION: NO DATA

## ITEM: 5ZR08 - GAUGE LIQUID FILLED

PICK REQ: 1110051723

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A6193

This MSDS should be attached or kept with the respective product with which it is associated.

DIAL SAFETY DATA SHEET - A6193

Associated Grainger Item: 5ZR08 - GAUGE LIQUID FILLED

1X696, 1X698, 1X700, 1X702, 1X704, 1X706, 1X708, 1X710, 1X712, 1X714, 1X716  
 1X718, 1X720, 1X722, 1X724, 2A211, 2P846, 2P847, 2P848, 2P849, 2P850, 2P851  
 3A420, 4A370, 4A371, 4A372, 5A041, 5A042, 5A043, 5A044, 5A045, 5HK51, 5HK52  
 5HK53, 5HK54, 5HK55, 5HK56, 5HK57, 5HK58, 5HK59, 5HK60, 5HK61, 5HK62, 5HK63  
 5HK64, 5HK65, 5HK66, 5HK67, 5HK68, 5HK69, 5HK70, 5HK71, 5HK72, 5HK75, 5X369  
 5X370, 5X371, 5X938, 5X939, 5XP52, 5XP54, 5XP56, 5XP58, 5XP60, 5XP62, 5XP65  
 5XP67, 5XP68, 5XP69, 5XP70, 5XP71, 5XP72, 5XP73, 5XP74, 5XP75, 5XP76, 5XP77  
 5XP80, 5XP81, 5XP82, 5XP86, 5XP87, 5XP88, 5XP89, 5ZP68, 5ZP69, 5ZP70, 5ZP71  
 5ZP72, 5ZP73, 5ZP74, 5ZP75, 5ZP76, 5ZP77, 5ZP78, 5ZP79, 5ZP80, 5ZP81, 5ZP82  
 5ZP83, 5ZP84, 5ZP85, 5ZP90, 5ZP91, 5ZP92, 5ZP93, 5ZP94, 5ZP95, 5ZP96, 5ZP97  
 5ZP98, 5ZP99, 5ZR01, 5ZR02, 5ZR03, 5ZR04, 5ZR05, 5ZR06, 5ZR07, 5ZR08, 5ZR09  
 5ZR10, 5ZR11, 5ZR12, 5ZR13, 5ZR14, 5ZR15

REPORT NUMBER: 703  
 MSDS NO: DZ08439  
 MAINFRAME UPLOAD DATE: 02/18/03

UNIVAR USA INC.  
 MATERIAL SAFETY DATA SHEET

VERSION: 007  
 PRODUCT: GLYCERINE

UNIVAR USA INC.  
 6100 CARILLON POINT  
 KIRKLAND, WA 98033  
 (425) 889-3400

EMERGENCY ASSISTANCE:  
 FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMIREC: (800) 424-9300

## PRODUCT IDENTIFICATION:

PRODUCT NAME: GLYCERINE

MSDS#: DZ08439

DATE ISSUED: 07/10/00

SUPERSEDES: NEW

ISSUED BY: 008360

## 1. CHEMICAL PRODUCT IDENTIFICATION

OUR EMERGENCY PHONE NUMBER: 989-636-4400

CT: GLYCERINE

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

GLYCERINE, MINIMUM CAS# 000056-81-5 99.7%

## 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:  
 WATER WHITE LIQUID. ODORLESS. NO SIGNIFICANT HAZARDS FOR EMERGENCY RESPONSE ARE KNOWN.

POTENTIAL HEALTH EFFECTS (SEE SECTION 11 FOR TOXICOLOGICAL DATA.)

EYE:  
 MAY CAUSE SLIGHT TRANSIENT (TEMPORARY) EYE IRRITATION. CORNEAL INJURY IS UNLIKELY.

SKIN:  
 PROLONGED OR REPEATED EXPOSURE NOT LIKELY TO CAUSE SIGNIFICANT SKIN IRRITATION. A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. MAY BE ABSORBED IN POTENTIALLY HARMFUL AMOUNTS WHEN APPLIED IN LARGE QUANTITIES TO SEVERE BURNS (SECOND OR THIRD DEGREE) OVER LARGE AREAS OF THE BODY AS PART OF A CREAM OR OTHER TOPICAL APPLICATION. ABSORPTION UNDER SUCH CIRCUMSTANCES CAN ELEVATE SERUM OSMOLALITY AND MAY RESULT IN OSMOTIC SHOCK.

INGESTION:  
 SINGLE DOSE ORAL TOXICITY IS CONSIDERED TO BE EXTREMELY LOW. SMALL AMOUNTS SWALLOWED INCIDENTAL TO NORMAL HANDLING OPERATIONS ARE NOT LIKELY TO CAUSE INJURY; SWALLOWING AMOUNTS LARGER THAN THAT MAY CAUSE INJURY. SIGNS AND SYMPTOMS OF EXCESSIVE EXPOSURE MAY BE CENTRAL NERVOUS SYSTEM EFFECTS AND INCREASED BLOOD SUGAR LEVELS.

INHALATION:  
 AT ROOM TEMPERATURE, VAPORS ARE MINIMAL DUE TO PHYSICAL PROPERTIES. IF HEATED OR SPRAYED AS AN AEROSOL, AIRBORNE MATERIAL MAY CAUSE UPPER RESPIRATORY IRRITATION.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:  
 REPEATED EXCESSIVE EXPOSURES MAY CAUSE INCREASED FAT LEVELS IN BLOOD. OBSERVATIONS IN ANIMALS INCLUDE KIDNEY, LIVER, AND GASTROINTESTINAL EFFECTS WITH VERY LARGE ORAL DOSES.

CANCER INFORMATION: DID NOT CAUSE CANCER IN LONG-TERM ANIMAL STUDIES.

TOXICOLOGY:  
 EFFECTS ARE UNLIKELY. EXPOSURES HAVING NO ADVERSE EFFECTS ON THE FETUS SHOULD HAVE NO EFFECT ON THE FETUS.

REPRODUCTIVE EFFECTS:  
 REPRODUCTIVE EFFECTS SEEN IN FEMALE ANIMALS ARE BELIEVED TO BE DUE TO ALTERED NUTRITIONAL STATUS RESULTING FROM EXTREMELY HIGH DOSES IN THEIR DIETS. SIMILAR EFFECTS HAVE BEEN SEEN IN ANIMALS FED SYNTHETIC DIETS.

## 4. FIRST AID

EYES: FLUSH EYES WITH PLENTY OF WATER.

SKIN: WASH OFF IN FLOWING WATER OR SHOWER.

## INGESTION:

IF SWALLOWED, SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS DIRECT TO DO SO BY MEDICAL PERSONNEL.

INHALATION: REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.

## NOTE TO PHYSICIAN:

NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

## 5. FIRE FIGHTING MEASURES

## FLAMMABLE PROPERTIES:

FLASH POINT: 390 F, 199C  
 METHOD USED: FMCC

AUTOIGNITION TEMPERATURE: 698 F, 370 C.

## FLAMMABILITY LIMITS:

LEL: NOT DETERMINED.

UFL: NOT DETERMINED.

## HAZARDOUS COMBUSTION PRODUCTS:

DURING A FIRE, SMOKE MAY CONTAIN THE ORIGINAL MATERIAL IN ADDITION TO UNIDENTIFIED TOXIC AND/OR IRRITATING COMPOUNDS. HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO: ALDEHYDES, CARBON MONOXIDE, CARBON DIOXIDE.

## OTHER FLAMMABILITY INFORMATION:

VIOLENT STEAM GENERATION OR ERUPTION MAY OCCUR UPON APPLICATION OF DIRECT WATER STREAM.

## EXTINGUISHING MEDIA:

WATER FOG OR FINE SPRAY, CARBON DIOXIDE, DRY CHEMICAL, FOAM, ALCOHOL RESISTANT FOAMS (AFC TYPE) OR PROTEIN FOAMS MAY FUNCTION, BUT MUCH LESS EFFECTIVELY. DO NOT USE DIRECT WATER STREAM. WILL SPREAD FIRE.

MEDIA TO BE AVOIDED: DO NOT USE DIRECT WATER STREAM.

## FIRE FIGHTING INSTRUCTIONS:

KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNNECESSARY ENTRY. BURNING LIQUIDS MAY BE MOVED BY FLUSHING WITH WATER TO PROTECT PERSONNEL AND MINIMIZE PROPERTY DAMAGE. BURNING LIQUIDS MAY BE EXTINGUISHED BY DILUTION WITH WATER. DO NOT USE DIRECT WATER STREAM. MAY SPREAD FIRE.

## PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:

WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND PROTECTIVE FIRE FIGHTING CLOTHING (INCLUDES FIRE FIGHTING HELMET, COAT, PANTS, BOOTS, AND GLOVES. IF PROTECTIVE EQUIPMENT IS NOT AVAILABLE OR NOT USED, FIGHT FIRE FROM A PROTECTED LOCATION OR SAFE DISTANCE.

## 6. ACCIDENTAL RELEASE MEASURES

(SEE SECTION 15 FOR REGULATORY INFORMATION)

## PROTECT PEOPLE:

KEEP UNNECESSARY PEOPLE AWAY; ISOLATE HAZARD AREA AND DENY UNNECESSARY ENTRY.

## PROTECT THE ENVIRONMENT:

KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATER AND SOIL.

## CLEANUP:

SMALL SPILLS: COVER WITH ABSORBENT MATERIAL, SOAK UP AND SWEEP INTO A DRUM. LARGE SPILLS: DIKE AROUND SPILL AND PUMP INTO SUITABLE CONTAINERS.

## 7. HANDLING AND STORAGE

HANDLING: PRACTICE REASONABLE CARE AND CAUTION.

## STORAGE:

GLYCERINE FREEZES AT 64F. GLYCERINE SHOULD BE KEPT ABOVE 64F BUT BELOW 130F.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## ENGINEERING CONTROLS:

PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE LEVELS BELOW THE EXPOSURE GUIDELINES.

## PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: USE SAFETY GLASSES.

## SKIN PROTECTION:

NO PRECAUTIONS OTHER THAN CLEAN BODY-COVERING CLOTHING SHOULD BE NEEDED.

## RESPIRATORY PROTECTION:

FOR MOST CONDITIONS, NO RESPIRATORY PROTECTION SHOULD BE NEEDED; HOWEVER, IF MATERIAL IS HEATED OR SPRAYED, USE AN APPROVED AIR-PURIFYING RESPIRATOR.

## EXPOSURE GUIDELINE:

## GLYCERIN:

ACGIH TLV IS 10 MG/M3. OSHA PEL IS 10 MG/M3 TOTAL, 5 MG/M3 RESPIRABLE. PELS ARE IN ACCORD WITH THOSE RECOMMENDED BY OSHA, AS IN THE 1989 REVISION OF PELS.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: WATER WHITE LIQUID.

ODOR: ODORLESS

VAPOR PRESSURE: <1.0 MMHg @ 20 C

VAPOR DENSITY: 3.1

BOILING POINT: 554 F, 290 C

SOLUBILITY IN WATER: MISCIBLE

SPECIFIC GRAVITY: 1.2607 @ 25/25 (MIN.)

#### 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE.

CONDITIONS TO AVOID:  
AVOID STRONG OXIDIZING AGENT (SUCH AS SODIUM HYPOCHLORITE, HYPOCHLOROUS ACID).

INCOMPATIBILITY WITH OTHER MATERIALS: OXIDIZING MATERIAL.

HAZARDOUS DECOMPOSITION PRODUCTS: ACRROLEIN.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

#### 11. TOXICOLOGICAL INFORMATION

(SEE SECTION 3 FOR POTENTIAL HEALTH EFFECTS. FOR DETAILED TOXICOLOGICAL DATA, WRITE OR CALL THE ADDRESS OR NON-EMERGENCY NUMBER SHOWN IN SECTION 1)

SKIN: THE LD50 FOR SKIN ABSORPTION IN RABBITS IS >10,000 MG/KG.

INGESTION: THE ORAL LD50 FOR RATS IS 17,000 TO 27,200 MG/KG.

INHALATION: THE LC50 FOR 6 HOURS IN RATS WAS >4 MG/LITER.

MUTAGENICITY: IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE.

#### 12. ECOLOGICAL INFORMATION

(FOR DETAILED ECOLOGICAL DATA, WRITE OR CALL THE ADDRESS OR NON-EMERGENCY NUMBER SHOWN IN SECTION 1)

ENVIRONMENTAL FATE:

MOVEMENT & PARTITIONING:

BASED LARGELY OR COMPLETELY ON INFORMATION FOR SIMILAR MATERIAL(S), I.E. GLYCERINE. BIOCONCENTRATION POTENTIAL IS LOW (BCF LESS THAN 100 OR LOG POW LESS THAN 3). LOG OCTANOL/WATER COEFFICIENT (LOG POW) IS -1.76.

DEGRADATION & PERSISTENCE:

BASED LARGELY OR COMPLETELY ON INFORMATION FOR SIMILAR MATERIAL(S), I.E. GLYCERINE.

DEGRADATION UNDER AEROBIC LABORATORY CONDITIONS IS HIGH (BOD20 OR B/THOD GREATER THAN 40%).

DEGRADATION IS EXPECTED TO BE ACHIEVABLE IN A SECONDARY WASTEWATER TREATMENT PLANT.

LABORATORY CONCENTRATION (IC50) IN OECD ACTIVATED SLUDGE RESPIRATION INHIBITION TEST (OECD TEST NO. 209) IS GREATER THAN 1000 MG/L.

5-DAY BIOCHEMICAL OXYGEN DEMAND (BOD5) IS 0.54 P/P.

10-DAY BIOCHEMICAL OXYGEN DEMAND (BOD10) IS 0.98 P/P.

20-DAY BIOCHEMICAL OXYGEN DEMAND (BOD20) IS 1.0 P/P.

THEORETICAL OXYGEN DEMAND (THOD) IS CALCULATED TO BE 1.22 P/P.

ECOTOXICITY:

BASED LARGELY OR COMPLETELY ON INFORMATION FOR SIMILAR MATERIAL(S), I.E. GLYCERINE.

MATERIAL IS PRACTICALLY NON-TOXIC TO FISH ON AN ACUTE BASIS (LC50 GREATER THAN 100 MG/L).

ACUTE LD50 FOR FATHEAD MINNOW (PIMEPHALES PROMELAS) IS 44000 MG/L.

ACUTE LD50 FOR GOLDFISH (CARASSIUS AURATUS) IS GREATER THAN 5000 MG/L.

#### 13. DISPOSAL CONSIDERATIONS

(SEE SECTION 15 FOR REGULATORY INFORMATION)

DISPOSAL:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. ALL DISPOSAL METHODS MUST BE IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL LAWS AND REGULATIONS. REGULATIONS MAY VARY IN DIFFERENT LOCATIONS. WASTE CHARACTERIZATIONS AND COMPLIANCE WITH APPLICABLE LAWS ARE THE RESPONSIBILITY SOLELY OF THE WASTE GENERATOR.

FOR UNUSED & UNCONTAMINATED PRODUCT, THE PREFERRED OPTIONS INCLUDE SENDING TO A LICENSED, PERMITTED:  
RECYCLER, RECLAIMER, INCINERATOR OR OTHER THERMAL DESTRUCTION DEVICE.

#### 14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

FOR DOT REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS, OR PRODUCT SHIPPING PAPERS.

NOT REGULATED FOR TRANSPORT BY DOT.

CANADIAN TDG INFORMATION:

FOR TDG REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS OR PRODUCT SHIPPING PAPERS.

#### 15. REGULATORY INFORMATION

(NOT MEANT TO BE ALL-INCLUSIVE - SELECTED REGULATIONS REPRESENTED)

SARA HAZARD CATEGORY:

PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" ELABORATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:  
1) HAVE MET ANY HAZARD CATEGORY

CANADIAN REGULATIONS:

WHMIS INFORMATION:

THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION FOR THIS PRODUCT IS: THIS PRODUCT IS NOT A "CONTROLLED PRODUCT" UNDER WHMIS.

#### 16. OTHER INFORMATION

FOR ADDITIONAL INFORMATION:

CONTACT:

MSDS COORDINATOR

UNIVAR USA INC.

DURING BUSINESS HOURS

PACIFIC TIME (425) 889-3400

NOTICE:

UNIVAR USA INC ("UNIVAR"), EXPRESSLY DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PRODUCT OR INFORMATION PROVIDED HEREIN, AND SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

DO NOT USE INGREDIENT INFORMATION AND/OR PERCENTAGES IN THIS MSDS AS A PRODUCT SPECIFICATION. FOR PRODUCT SPECIFICATION INFORMATION REFER TO A PRODUCT SPECIFICATION SHEET AND/OR A CERTIFICATE OF ANALYSIS. THESE CAN BE OBTAINED FROM YOUR LOCAL UNIVAR SALES OFFICE.

ALL INFORMATION APPEARING HEREIN IS BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/OR RECOGNIZED TECHNICAL SOURCES. WHILE THE INFORMATION IS BELIEVED TO BE ACCURATE, UNIVAR MAKES NO REPRESENTATIONS AS TO ITS ACCURACY OR SUFFICIENCY. CONDITIONS OF USE ARE BEYOND UNIVAR'S CONTROL AND THEREFORE USERS ARE RESPONSIBLE TO VERIFY THIS DATA UNDER THEIR OWN OPERATING CONDITIONS TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PARTICULAR PURPOSES AND THEY ASSUME ALL RISKS OF THEIR USE, HANDLING, AND DISPOSAL OF THE PRODUCT, OR FROM THE PUBLICATION OR USE OF, OR RELIANCE UPON, INFORMATION CONTAINED HEREIN. THIS INFORMATION RELATES ONLY TO THE PRODUCT DESIGNATED HEREIN, AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY OTHER PROCESS.

## ITEM: 4TA15 - Gauge Pressure 200 PSI

PICK REQ: 1037951358

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A6621

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A6621

Associated Grainger Item: 4TA15 - Gauge Pressure 200 PSI

4TA12, 4TA13, 4TA14, 4TA15, 4TA16, 4TA17, 4TA18, 4TA19, 4TA20, 4TA21

SAFETY DATA SHEET

ACCORDING TO EC-DIRECTIVE 2001/58/EC

GLYCERINE 1.262

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT LABEL NAME: GLYCEROL, 99.5%

SUPPLIER:  
AKZO NOBEL CHEMICALS GMBH  
INDUSTRIESTRASSE 10  
D-46446 EMMERICH  
GERMANY  
TEL.: +49-(0)2822 74460

EMERGENCY TELEPHONE:  
+31 570679211 (FAX: +31 570679801)  
AKZO NOBEL CHEMICALS-DEVENTER-NL

INTENDED USE: PERSONAL CARE.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

THIS PRODUCT IS TO BE CONSIDERED AS A SUBSTANCE IN CONFORMANCE TO EC DIRECTIVES INFORMATION ON HAZARDOUS INGREDIENTS

CHEMICAL DESCRIPTION: GLYCEROL, 99.5%

COMPOSITION/INFORMATION ON INGREDIENTS:

NUMBER	% W/W	CAS-NUMBER	CHEMICAL NAME		
1	>=99.5	56-81-5	1,2,3-PROPANETRIOL		
NUMBER	EC-NUMBER	ANNEX-1 NUMBER	SYMBOL(S)	RISK-PHASE(S)	
1	200-289-5		NONE	NONE	

## 3. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE EEC DANGEROUS SUBSTANCE DIRECTIVE AND DANGEROUS PREPARATION DIRECTIVE.

## 4. FIRST AID MEASURES

SYMPTOMS AND EFFECTS: NO TYPICAL SYMPTOMS AND EFFECTS KNOWN

FIRST AID:

GENERAL:  
IN ALL CASES OF DOUBT, OR WHEN SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION.

INHALATION:  
THIS IS ONLY POSSIBLE BY EXPOSURE TO HOT PRODUCT. MOVE TO FRESH AIR, REST, HALF UPRIGHT POSITION, LOOSEN CLOTHING. OXYGEN OR ARTIFICIAL RESPIRATION IF THERE IS DIFFICULTY IN BREATHING. SEEK MEDICAL ADVICE AFTER SIGNIFICANT EXPOSURE. SYMPTOMATIC TREATMENT IS ADVISED.

SKIN:  
REMOVE CONTAMINATED CLOTHING. SEEK MEDICAL ADVICE IF IRRITATION DEVELOPS. LAUNDER CLOTHES BEFORE REUSE. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.

EYE:  
RINSE THOROUGHLY WITH PLENTY OF WATER. EYELIDS SHOULD BE HELD AWAY FROM THE EYEBALL TO ENSURE THOROUGH RINSING. SEEK MEDICAL ADVICE IF IRRITATION DEVELOPS.

INGESTION: NO TYPICAL SYMPTOMS AND EFFECTS KNOWN

ADVICE TO PHYSICIAN: SYMPTOMATIC TREATMENT IS ADVISED.

## 5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:  
WATER MIST, ALCOHOL RESISTANT FOAM, DRY POWDER, CARBON DIOXIDE.

UNSUITABLE EXTINGUISHING MEDIA: WATERJET, FOAM.

SPECIAL EXPOSURE HAZARDS: VAPOURS CAUSE COUGHING.

HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS:  
AT ELEVATED TEMPERATURES THERE IS A RISK OF EXOTHERMIC POLYMERIZATION (>200 DEG. C). AT TEMPERATURES >280 DEG. C, ACRYLEIN MAY BE FORMED.

PROTECTIVE EQUIPMENT: NO SPECIFIC RECOMMENDATIONS

INFORMATION:  
CONTACT WITH OXIDIZING AGENTS. COOL CLOSED CONTAINERS WITH WATER.

## 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:  
THE USUAL PRECAUTIONS FOR HANDLING CHEMICALS SHOULD BE OBSERVED

ENVIRONMENTAL PRECAUTIONS: NO SPECIFIC RECOMMENDATIONS

METHODS FOR CLEANING UP:  
COLLECT AS MUCH AS POSSIBLE IN A CLEAN CONTAINER FOR (PREFERABLE) REUSE OR DISPOSAL.

OTHER INFORMATION: FOR PERSONAL PROTECTION SEE SECTION 8.

## 7. HANDLING AND STORAGE

HANDLING: THE USUAL PRECAUTIONS FOR HANDLING CHEMICALS SHOULD BE OBSERVED

FIRE AND EXPLOSION PREVENTION:  
NO SPECIFIC RECOMMENDATIONS. AVOID CONTACT WITH OXIDIZING AGENTS.

STORAGE REQUIREMENTS: NO SPECIFIC RECOMMENDATIONS.

OTHER INFORMATION:  
TO MAINTAIN QUALITY:  
STORE AT AMBIENT TEMPERATURES. AVOID ELEVATED TEMPERATURES.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:  
THE USUAL PRECAUTIONARY MEASURES FOR HANDLING CHEMICALS SHOULD BE OBSERVED.

EXPOSURE LIMITS: NO EXPOSURE LIMIT HAS BEEN ESTABLISHED

PERSONAL PROTECTION:  
RESPIRATORY: NO SPECIFIC RECOMMENDATIONS.  
HAND: NO SPECIFIC RECOMMENDATIONS.  
EYE: NO SPECIFIC RECOMMENDATIONS  
SKIN AND BODY: NO SPECIFIC RECOMMENDATIONS.

OTHER INFORMATION:  
THE USUAL PRECAUTIONS FOR HANDLING CHEMICALS SHOULD BE OBSERVED.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: LIQUID (20 DEG. C)

COLOUR: COLOURLESS

ODOUR: ODOURLESS

BOILING POINT/RANGE: 290 DEG. C

MELTING POINT/RANGE: SOLIDIFIES AT &lt; -16 DEG. C

FLASH POINT: &gt;100 DEG. C, PENSKEY-MARTENS CLOSED CUP

FLAMMABILITY: NOT DETERMINED

AUTOIGNITION TEMPERATURE: 429 DEG. C

EXPLOSIVE PROPERTIES: NONE KNOWN

EXPLOSION LIMITS: NO DATA AVAILABLE

OXIDIZING PROPERTIES: NONE KNOWN

VAPOUR PRESSURE: &lt;0.1 PA (20 DEG. C)

DENSITY: APPROX. 1260 KG/M3 (20 DEG. C)

BULK DENSITY: NOT RELEVANT

SOLUBILITY IN WATER: SOLUBLE

SOLUBILITY IN OTHER SOLVENTS: NOT DETERMINED

pH VALUE: NEUTRAL

PARTITION COEFFICIENT N-OCTANOL/WATER: NOT DETERMINED

RELATIVE VAPOUR DENSITY (AIR=1): NOT DETERMINED

VISCOSITY: 1400 MPA.S (20 DEG. C)

## 10. STABILITY AND REACTIVITY

STABILITY: NO DECOMPOSITION IF STORED AND HANDLED PROPERLY.

CONDITIONS TO AVOID: TEMPERATURE &gt;200 DEG. C (POLYMERIZATION, DECOMPOSES).

MATERIALS TO AVOID: AVOID CONTACT WITH OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: ACRYLEIN (&gt;280 DEG. C).

## 11. TOXICOLOGICAL INFORMATION

NAME: GLYCEROL

ACUTE TOXICITY:  
ORAL LD50: >2000 MG/KG (RAT) (IUCLID).

IRRITATION:  
SKIN: MILDLY IRRITATING (IUCLID).  
EYE: MILDLY IRRITATING (IUCLID).

## 12. ECOLOGICAL INFORMATION

NAME: GLYCEROL

ECOTOXICITY:

FISH:  
96H-LC50: >5000 MG/L (IUCLID).

ALGAE:  
48H-EC50: >2900 MG/L (LIT.).

BACTERIA:  
72H-IC50: >10000 MG/L (IUCLID).

DEGRADATION BIOTIC: BIODEGRADABLE.

### 13. DISPOSAL CONSIDERATIONS

PRODUCT:  
ACCORDING TO LOCAL REGULATIONS (MOST PROBABLY CONTROLLED INCINERATION).  
CONTAMINATED PACKAGING: ACCORDING TO LOCAL REGULATIONS

### 14. TRANSPORT INFORMATION

LAND TRANSPORT (ADR/RID):  
ADR CLASS: NOT RESTRICTED  
ADR CLASSIFICATION CODE: NOT RELEVANT/NOT RELEVANT  
RID CLASS: NOT RESTRICTED  
ADR/RID PACKING GROUP: NOT RELEVANT/NOT RELEVANT  
HAZARD IDENTIFICATION NO.: NOT RELEVANT  
SUBSTANCE IDENTIFICATION NO.: NOT RELEVANT  
TREM-CARD: NOT RELEVANT  
UN NUMBER: NONE  
PROPER SHIPPING NAME: NOT RELEVANT

SEA TRANSPORT (IMDG-CODE/IMO):  
IMO/IMDG CODE: NOT RESTRICTED  
CLASS: NOT RESTRICTED  
PACKING GROUP: NOT RELEVANT  
UN NUMBER: NONE  
EMS: NOT RELEVANT  
SUBSIDIARY RISK: NOT RELEVANT  
MARINE POLLUTANT: NO  
PROPER SHIPPING NAME: NOT RELEVANT

AIR TRANSPORT (ICAO-TI/IATA-DGR):  
ICAO-TI/IATA-DGR:  
UN NUMBER: NONE  
CLASS: NOT RESTRICTED  
PACKING GROUP: NOT RELEVANT  
PROPER SHIPPING NAME: NOT RELEVANT

### 15. REGULATORY INFORMATION

CHEMICAL DESCRIPTION: GLYCEROL, 99.5%

LABELING ACCORDING TO EC DIRECTIVES:

EC-NUMBER: SEE SECTION 2.

SYMBOL(S): NONE

PHRASE(S): NONE.

SAFETY) PHRASE(S): NONE.

WASSERGEFAHRDUNGSKLASSE (WGK): 1 (VWVWS ANHANG 1 KENN-NR. 116)

### 16. OTHER INFORMATION

THIS INFORMATION ONLY CONCERNS THE ABOVE MENTIONED PRODUCT AND DOES NOT NEED TO BE VALID IF USED WITH OTHER PRODUCT(S) OR IN ANY PROCESS. THE INFORMATION IS TO OUR BEST PRESENT KNOWLEDGE CORRECT AND COMPLETE AND IS GIVEN IN GOOD FAITH BUT WITHOUT WARRANTY. IT REMAINS THE USER'S OWN RESPONSIBILITY TO MAKE SURE THAT THE INFORMATION IS APPROPRIATE AND COMPLETE FOR HIS SPECIAL USE OF THIS PRODUCT.

R-PHRASE INFORMATION:

CHEMICAL NAME RISK-PHRASE(S)

1,2,3-PROPANETRIOL NONE NONE

HISTORY:

DATE OF PRINTING/PDF FILE GENERATED: 2004/09/29

REVISION: 1.03

COMPOSED BY:  
DR. B. WEUSTE  
J. VAN KOOTEN

CHANGES WERE MADE IN SECTION: 11, 12, 15, 16

PRODUCT CODE: 266011

DATE OF LAST ISSUE: 2004/05/26

ICS: 409

GB - AENGLISH

ITEM: 2W765 - GLASS BEAD BLAST MEDIA

PICK REQ: 0182585837

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A5865

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A5865

Related Grainger Item: 2W765 - GLASS BEAD BLAST MEDIA

POTTERS INDUSTRIES INC.  
AN AFFILIATE OF THE PQ CORPORATION

MATERIAL SAFETY DATA SHEET

BALLOTINI IMPACT BEADS

HMS RATING:

0  
0  
0

SECTION 1 IDENTIFICATION OF PRODUCT

MANUFACTURER: POTTERS INDUSTRIES INC.

ADDRESS:  
SOUTHPOINT  
P. O. BOX 840  
VALLEY FORGE, PA 19482-0840

24 HOUR EMERGENCY TEL NO: 610-651-4700

SALES NAME: BALLOTINI IMPACT BEADS

CHEMICAL NAME: GLASS OXIDE

COMPONENTS: SODA-LIME GLASS

TSCA CAS REGISTRY NO(S): 65997-17-3

DOT HAZARD CLASS: N.A.

DOT SHIPPING NAME: N.A.

SECTION 2 CHEMICAL AND PHYSICAL DATA

APPEARANCE & ODOR: ODORLESS WHITE POWDER.

SPECIFIC GRAVITY: 2.46-2.49 G/CC

SOLUBILITY IN WATER: INSOLUBLE

pH (AQUEOUS LIQUIDS ONLY): N.A.

CHARACTERISTICS: SOFTENING POINT 730 DEG. C

SECTION 3 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (DEG. F): NON-COMBUSTIBLE AND NONFLAMMABLE.

FLAMMABLE LIMITS (VAPOR IN AIR, VOL. %): N.A.

FIRE EXTINGUISHING MEDIA: N.A.

SPECIAL FIRE FIGHTING PROCEDURES: N.A.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION 4 REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): HYDROFLUORIC ACID.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 5 SPILL OR LEAK PROCEDURES

ENVIRONMENTAL HAZARDS:

NO ADVERSE EFFECTS KNOWN OR SUSPECTED. NOT AN RCRA HAZARDOUS SUBSTANCE OR OSHA HAZARDOUS CHEMICAL. DOES NOT CONTAIN A LISTED TOXIC CHEMICAL UNDER SARA TITLE 111 SUBSECTION 302, SUBSECTION 304 OR SUBSECTION 313.

SPILLAGE: SWEEP UP AND DISCARD.

WASTE DISPOSAL METHOD:

LANDFILL ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

OTHER PRECAUTIONS:

SPILLAGE MAY RESULT IN SLIPPERY CONDITIONS. WHEN TRANSPORTING MATERIAL, CARE SHOULD BE TAKEN TO AVOID DUSTING.

SECTION 6 HEALTH HAZARD DATA

HEALTH HAZARDS:

IN EXCESS OF RECOMMENDED EXPOSURE LIMITS MAY RESULT IN IRRITATION TO RESPIRATORY TRACT.

(S) OF ENTRY: INHALATION

GENOTOXICITY: NOT LISTED UNDER NTP, IARC MONOGRAPHS, OR OSHA.

MEDICAL CONDITIONS:

CHRONIC LUNG CONDITIONS MAY BE AGGRAVATED BY EXPOSURE TO HIGH CONCENTRATIONS OF DUST.

EMERGENCY AND FIRST AID PROCEDURES: REMOVE TO FRESH AIR.

OTHER CHARACTERISTICS:

CONTAINS NO FREE SILICA; ALL COMPONENTS AMORPHOUS/NON-CRYSTALLINE.

SECTION 7 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

USE NIOSH APPROVED DUST MASK OR RESPIRATOR WHERE AIRBORNE DUST IS GENERATED. OBSERVE OSHA REGULATIONS FOR RESPIRATOR USE (29 CFR 1910.134)

GLOVES: NONE REQUIRED.

EYE PROTECTION: NIOSH APPROVED SAFETY GLASSES OR GOGGLES.

OTHER PROTECTIVE EQUIPMENT: NONE REQUIRED.

PERSONAL HYGIENE:

AVOID BREATHING DUST. AVOID CONTACT WITH EYES. WASH EYES OUT IMMEDIATELY AFTER CONTACT.

ENGINEERING CONTROL:

LOCAL EXHAUST IS RECOMMENDED FOR OPERATIONS THAT GENERATE NUISANCE DUST IN EXCESS OF OSHA EXPOSURE LIMITS.

SECTION 8 SUBSTANCES FOR WHICH STANDARDS HAVE BEEN SET

COMPONENTS: GLASS OXIDE, C.A.S. NO. 65997-17-3

PERCENTAGE: 100%

OSHA EXPOSURE LIMIT:

NUISANCE DUST: OSHA PEL 15 MG/M3, ACGIH TLV 10 MG/M3.

RESPIRABLE FRACTION: OSHA PEL 5 MG/M3, ACGIH TLV 5 MG/M3.

EXPOSURE ANALYSIS METHOD:

NIOSH MANUAL OF ANALYTICAL METHODS, 3RD., METHOD 7501 (1984).

SECTION 9 SOURCE OF INFORMATION

WALTER E. KOZLOWSKI

DATE: 1/13/03

N.A. = NOT APPLICABLE

ORDER: 1046286601

ITEM: 2V712 - Lamp Mvr250/U 250 W

HAZMAT: 2V712

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 2V712  
MSDS # : A8921  
FREIGHT CODE : 0274  
DOT PROPER SHIP NAME : GENERAL, N.O.I., ITEMS NOT REGULATED WHEN SHIPPED  
VIA GROUND, NOTE: FOR UN2911, NO DANGEROUS GOODS  
TRANSPORT DOCUMENTATION REQUIRED AS PER DOT 49 CFR  
173.424 AND IMDG 2.7.9.1

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER :

UN ID # :

PACKING GROUP :

SHIPPING LABEL :

LIMITED QUANTITY :

CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON

DOT/UPS EXEMPTION NO. :

COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!

SHIPPING-PAPERS :

PLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

**MSDS: A8921**

#####

THE POWER OFF BEFORE REPLACING THE LAMP. 6V631, 6V698, 6V699, 6V746, 6V747, 6V  
6V757, 6VR49, 6XT44, 6XT88, 6XT89, 6XT90, 6XT91, 6XT92, 6XT93, 6XT94  
6V624, 6V625, 6V627, 6V638, 6V639, 6V640, 6V641, 6V642, 6V643, 6V644, 6V645, 6V646, 6V647, 6V648, 6V649, 6V650, 6V651, 6V652, 6V653, 6V654, 6V655, 6V656, 6V657, 6V658, 6V659, 6V660, 6V661, 6V662, 6V663, 6V664, 6V665, 6V666, 6V667, 6V668, 6V669, 6V670, 6V671, 6V672, 6V673, 6V674, 6V675, 6V676, 6V677, 6V678, 6V679, 6V680, 6V681, 6V682, 6V683, 6V684, 6V685, 6V686, 6V687, 6V688, 6V689, 6V690, 6V691, 6V692, 6V693, 6V694, 6V695, 6V696, 6V697, 6V698, 6V699, 6V700, 6V701, 6V702, 6V703, 6V704, 6V705, 6V706, 6V707, 6V708, 6V709, 6V710, 6V711, 6V712, 6V713, 6V714, 6V715, 6V716, 6V717, 6V718, 6V719, 6V720, 6V721, 6V722, 6V723, 6V724, 6V725, 6V726, 6V727, 6V728, 6V729, 6V730, 6V731, 6V732, 6V733, 6V734, 6V735, 6V736, 6V737, 6V738, 6V739, 6V740, 6V741, 6V742, 6V743, 6V744, 6V745, 6V746, 6V747, 6V748, 6V749, 6V750, 6V751, 6V752, 6V753, 6V754, 6V755, 6V756, 6V757, 6V758, 6V759, 6V760, 6V761, 6V762, 6V763, 6V764, 6V765, 6V766, 6V767, 6V768, 6V769, 6V770, 6V771, 6V772, 6V773, 6V774, 6V775, 6V776, 6V777, 6V778, 6V779, 6V780, 6V781, 6V782, 6V783, 6V784, 6V785, 6V786, 6V787, 6V788, 6V789, 6V790, 6V791, 6V792, 6V793, 6V794, 6V795, 6V796, 6V797, 6V798, 6V799, 6V800, 6V801, 6V802, 6V803, 6V804, 6V805, 6V806, 6V807, 6V808, 6V809, 6V810, 6V811, 6V812, 6V813, 6V814, 6V815, 6V816, 6V817, 6V818, 6V819, 6V820, 6V821, 6V822, 6V823, 6V824, 6V825, 6V826, 6V827, 6V828, 6V829, 6V830, 6V831, 6V832, 6V833, 6V834, 6V835, 6V836, 6V837, 6V838, 6V839, 6V840, 6V841, 6V842, 6V843, 6V844, 6V845, 6V846, 6V847, 6V848, 6V849, 6V850, 6V851, 6V852, 6V853, 6V854, 6V855, 6V856, 6V857, 6V858, 6V859, 6V860, 6V861, 6V862, 6V863, 6V864, 6V865, 6V866, 6V867, 6V868, 6V869, 6V870, 6V871, 6V872, 6V873, 6V874, 6V875, 6V876, 6V877, 6V878, 6V879, 6V880, 6V881, 6V882, 6V883, 6V884, 6V885, 6V886, 6V887, 6V888, 6V889, 6V890, 6V891, 6V892, 6V893, 6V894, 6V895, 6V896, 6V897, 6V898, 6V899, 6V900, 6V901, 6V902, 6V903, 6V904, 6V905, 6V906, 6V907, 6V908, 6V909, 6V910, 6V911, 6V912, 6V913, 6V914, 6V915, 6V916, 6V917, 6V918, 6V919, 6V920, 6V921, 6V922, 6V923, 6V924, 6V925, 6V926, 6V927, 6V928, 6V929, 6V930, 6V931, 6V932, 6V933, 6V934, 6V935, 6V936, 6V937, 6V938, 6V939, 6V940, 6V941, 6V942, 6V943, 6V944, 6V945, 6V946, 6V947, 6V948, 6V949, 6V950, 6V951, 6V952, 6V953, 6V954, 6V955, 6V956, 6V957, 6V958, 6V959, 6V960, 6V961, 6V962, 6V963, 6V964, 6V965, 6V966, 6V967, 6V968, 6V969, 6V970, 6V971, 6V972, 6V973, 6V974, 6V975, 6V976, 6V977, 6V978, 6V979, 6V980, 6V981, 6V982, 6V983, 6V984, 6V985, 6V986, 6V987, 6V988, 6V989, 6V990, 6V991, 6V992, 6V993, 6V994, 6V995, 6V996, 6V997, 6V998, 6V999, 6V1000, 6V1001, 6V1002, 6V1003, 6V1004, 6V1005, 6V1006, 6V1007, 6V1008, 6V1009, 6V1010, 6V1011, 6V1012, 6V1013, 6V1014, 6V1015, 6V1016, 6V1017, 6V1018, 6V1019, 6V1020, 6V1021, 6V1022, 6V1023, 6V1024, 6V1025, 6V1026, 6V1027, 6V1028, 6V1029, 6V1030, 6V1031, 6V1032, 6V1033, 6V1034, 6V1035, 6V1036, 6V1037, 6V1038, 6V1039, 6V1040, 6V1041, 6V1042, 6V1043, 6V1044, 6V1045, 6V1046, 6V1047, 6V1048, 6V1049, 6V1050, 6V1051, 6V1052, 6V1053, 6V1054, 6V1055, 6V1056, 6V1057, 6V1058, 6V1059, 6V1060, 6V1061, 6V1062, 6V1063, 6V1064, 6V1065, 6V1066, 6V1067, 6V1068, 6V1069, 6V1070, 6V1071, 6V1072, 6V1073, 6V1074, 6V1075, 6V1076, 6V1077, 6V1078, 6V1079, 6V1080, 6V1081, 6V1082, 6V1083, 6V1084, 6V1085, 6V1086, 6V1087, 6V1088, 6V1089, 6V1090, 6V1091, 6V1092, 6V1093, 6V1094, 6V1095, 6V1096, 6V1097, 6V1098, 6V1099, 6V1100, 6V1101, 6V1102, 6V1103, 6V1104, 6V1105, 6V1106, 6V1107, 6V1108, 6V1109, 6V1110, 6V1111, 6V1112, 6V1113, 6V1114, 6V1115, 6V1116, 6V1117, 6V1118, 6V1119, 6V1120, 6V1121, 6V1122, 6V1123, 6V1124, 6V1125, 6V1126, 6V1127, 6V1128, 6V1129, 6V1130, 6V1131, 6V1132, 6V1133, 6V1134, 6V1135, 6V1136, 6V1137, 6V1138, 6V1139, 6V1140, 6V1141, 6V1142, 6V1143, 6V1144, 6V1145, 6V1146, 6V1147, 6V1148, 6V1149, 6V1150, 6V1151, 6V1152, 6V1153, 6V1154, 6V1155, 6V1156, 6V1157, 6V1158, 6V1159, 6V1160, 6V1161, 6V1162, 6V1163, 6V1164, 6V1165, 6V1166, 6V1167, 6V1168, 6V1169, 6V1170, 6V1171, 6V1172, 6V1173, 6V1174, 6V1175, 6V1176, 6V1177, 6V11

A TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) TEST CONDUCTED ON THE LAMP FOR LEAD OR MERCURY COULD CAUSE THE LAMP TO BE CLASSIFIED AS A GE CON HAZARDOUS WASTE. MERCURY LAMPS USE LEAD SOLDER ON THE LAMP BASE AND MERCURY IN THE ARC TUBE. THE LEAD SOLDER OR MERCURY VAPOR SHOULD POSE LITTLE RISK OAMP EXPOSURE UNDER NORMAL USE AND HANDLING. WHILE SMALL NUMBERS OF THESE LAMPS ARE USED IN THE ORDINARY TRASH SHOULD NOT APPLICABLY SEPARATE THESE LAMPS FROM THE METHOD OF DISPOSAL OF THE TRASH. IN MOST STATES, UNDER SOME CIRCUMSTANCES DISPOSAL OF LARGE QUANTITIES MAY BE REGULATED. YOU SHOULD REVIEW YOUR WASTE/MATERIAL HANDLING PRACTICES TO ASSURE THAT YOU DISPOSE OF WASTE LAMPS PROPERLY. THE M PLEASE CHECK WITH STATE ENVIRONMENTAL DEPARTMENTS REGARDING INDIVIDUAL STATE AND DISPOSAL REQUIREMENTS.

AUGUST 2004

THE FOLLOWING INFORMATION IS PROVIDED AS A SERVICE TO OUR CUSTOMERS.  
FOLLOWING LAMP MATERIAL INFORMATION SHEET CONTAINS APPLICABLE MATERIAL  
SAFETY DATA SHEET INFORMATION.

## GE-MERCURY VAPOR LAMPS

GE CONSUMER & INDUSTRIAL LIGHTING  
1975 NOBLE ROAD  
NELA PARK  
CLEVELAND, OH 44112  
(216)-266-2222

THESE LAMPS CONSIST OF AN INNER QUARTZ ARC TUBE ENCLOSED IN AN OUTER ENVELOPE OF HEAT-RESISTANT GLASS. DEPENDING ON THE LAMP TYPE, THE ENVELOPE IS EITHER CLEAR OR COATED WITH ONE OF TWO DIFFERENT MATERIALS.

THE PHOSPHOR USED ON THE OUTER ENVELOPE OF THE "DX" TYPE LAMPS CONSISTS OF YTTRIUM VANADATE PHOSPHATE. THIS MATERIAL, LIKE MOST VANADIUM COMPOUNDS, IS RELATIVELY INSOLUBLE, AND APPEARS TO HAVE A MUCH LOWER TOXICITY THAN VANADIUM PENTOXIDE BUT MAY ELICIT SOME SIMILAR SYMPTOMS AT HIGH EXPOSURE LEVELS. EXCESSIVE INHALATION EXPOSURE TO VANADIUM PENTOXIDE MAY RESULT IN IRRITATION OF THE NASAL PASSAGE AND RESPIRATORY TRACT, DISABILITY IN BREATHING, AND BRONCHITIS. HOWEVER, THE YTTRIUM VANADIUM PHOSPHATE FROM THE BREAKAGE OF ONE OR A SMALL NUMBER OF LAMPS SHOULD NOT RESULT IN A SIGNIFICANT EXPOSURE.

THE PHOSPHOR USED ON THE OUTER ENVELOPE OF THE "WDX" LAMPS IS THE SAME AS THAT IN THE "DX" LAMPS BUT WITH THE ADDITION OF A SMALL AMOUNT OF MAGNESIUM GERMANATE PHOSPHOR, A TOXICOLOGICALLY RELATIVELY INERT MATERIAL.

THE QUARTZ ARC TUBE CONTAINS A SMALL AMOUNT OF MERCURY, RANGING FROM 14 MILLIGRAMS IN A 50 WATT UP TO 250 MG IN A 1000 WATT LAMP. THE ARC TUBE CONTAINS A SMALL AMOUNT OF INERT GAS ARGON USED AS A FILL GAS. IT ALSO CONTAINS A SMALL AMOUNT OF OTHER MATERIALS, USED AS AN EMISSION MIX ON THE ELECTRODES, BUT THERE WOULD BE NO SIGNIFICANT EXPOSURE FROM LAMP BREAKAGE.

ALSO CONTAINED IN THE ARC TUBE ARE SMALL AMOUNTS OF SODIUM AND SCANDIUM IODIDE, AND IN SOME CASES THORIUM IODIDE. NONE OF THESE MATERIALS ARE EXPECTED TO BE A HAZARD IN THE SMALL QUANTITIES PRESENT IN THE ARC TUBE. THE COATING ON THE END(S) OF THE ARC TUBE IS ALUMINUM OXIDE, A MATERIAL GENERALLY CONSIDERED TO HAVE A LOW ORDER OF TOXICITY.

INTERNALLY, THE SUPPORT WIRES USED IN THE LAMP CONSTRUCTION ARE MADE FROM NICKEL-COATED IRON OR STAINLESS STEEL WHILE THE ELECTRODES ARE TUNGSTEN. MANY OF THE MERCURY LAMP TYPES WILL USE A BRASS BASE AND HAVE LEAD-SOLDERED CONNECTIONS TO THAT BASE.

**MERCURY EXPOSURE:**

THE AIR CONCENTRATION OF MERCURY RESULTING FROM THE BREAKAGE OF ONE OR A SMALL NUMBER OF LAMPS SHOULD RESULT IN NO SIGNIFICANT EXPOSURE TO THE INDIVIDUAL. HOWEVER, IF BREAKING A LARGE NUMBER OF LAMPS FOR DISPOSAL, APPROPRIATE MONITORING, CONTROLS AND EQUIPMENT SHOULD BE IMPLEMENTED TO CONTROL AIRBORNE MERCURY AND DUST LEVELS OR SURFACE CONTAMINATION. SUCH WORK SHOULD BE DONE IN A WELL-VENTILATED AREA, AND LOCAL EXHAUST VENTILATION OR PERSONAL PROTECTIVE EQUIPMENT MAY BE NEEDED.

ULTRAVIOLET (UV) RADIATION:  
THE QUARTZ ARC TUBE, WHEN OPERATING, GENERATES A CONSIDERABLE AMOUNT OF  
ULTRAVIOLET RADIATION. THE UV IS FILTERED TO ACCEPTABLE LEVELS BY THE GLASS  
OUTER ENVELOPE DURING NORMAL USE. HOWEVER, IF THE OUTER ENVELOPE IS BROKEN,  
THE UV FILTERING IS LOST. LAMPS HAVING ORDERING CODES BEGINNING WITH THE  
LETTERS "HR" OR "HSB" HAVE THE FOLLOWING WARNING NOTICE REQUIRED UNDER  
FEDERAL REGULATION 21 CFR 1040.30:

## ITEM: 5A924 - Wheel 3x1/16x3/8 In

PICK\_REQ: 1030128228

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A6423

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A6423

Associated Grainger Item: 5A924 - Wheel 3x1/16x3/8 In

3WL69, 3WN86, 3WR07, 3WR10, 3WR15, 3WR18, 3WR34, 3WT08, 3WV16, 3WV26, 3WV23  
3WW36, 3WW40, 4B150, 4B164, 4B165, 4B167, 4B169, 4B173, 4B174, 4B175, 4F873  
4F874, 4F875, 4F876, 5A863, 5A864, 5A865, 5A866, 5A867, 5A868, 5A869, 5A871  
5A875, 5A877, 5A878, 5A879, 5A924, 5A925, 5A926, 5A928, 5A929, 5A931, 5A933  
5A935, 5A936, 5A939, 5A940

NORTON

MATERIAL SAFETY DATA SHEET

DATE PRINTED: JUN 01, 2004

MSDS NO.: SICN2RESIN000 OUTBOUND

SIC/NORZON RESIN GRINDING WHEEL

## SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: SIC/NORZON RESIN GRINDING WHEEL

TRADE NAME: CRYSTALON/NORZON

MANUFACTURER (4):  
SAINT-GOBAIN ABRASIVES, INC.  
ONE NEW BOND STREET  
WORCESTER, MA, 01606  
(508) 795-5000

REVISION DATE: 6/01/2004

MSDS PRINT FORMAT

NUSA

## SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
ALUMINUM OXIDE, NON-FIBROUS	20.000-30.000	1344-28-1
CURED PHENOLFORMALDEHYDE RESIN	3.000-6.000	9003-35-4
FIBERGLASS	0.003-3.000	65997-17-3
SILICON CARBIDE	35.000-45.000	409-21-2
ALUMINUM OXIDE	15.000-25.000	1314-23-4

OTHER: NOT APPLICABLE

## SECTION 3. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS:  
DUST MAY BE SLIGHTLY IRRITATING TO EYES AND RESPIRATORY TRACT AT HIGH CONCENTRATIONS.

INHALATION CHRONIC EXPOSURE EFFECTS:  
CHRONIC: MAY AFFECT BREATHING CAPACITY.  
FOR PRODUCTS CONTAINING PHENOL/FORMALDEHYDE RESIN, DUST GENERATED FROM INTENDED USE MAY CONTAIN TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE WHICH UNDER EXCESSIVE EXPOSURE MAY CAUSE SKIN SENSITIZATION AND AIRWAY OBSTRUCTION.  
FOR PRODUCTS CONTAINING INORGANIC FLUORIDES, EXCESSIVE EXPOSURE TO INORGANIC FLUORIDES HAVE BEEN SHOWN TO INCREASE BONE DENSITY.

EYE CONTACT ACUTE EXPOSURE EFFECTS: DUST MAY IRRITATE EYES.

SKIN CONTACT ACUTE EXPOSURE EFFECTS:  
SOME MAY EXPERIENCE SKIN IRRITATION FROM DUST.

INGESTION ACUTE EXPOSURE EFFECTS:  
NO KNOWN ADVERSE EFFECTS, BUT INGESTION NOT RECOMMENDED.

## SECTION 4. FIRST AID MEASURES

INHALATION:  
REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:  
WASH AFFECTED AREAS WITH SOAP AND WATER. OBTAIN MEDICAL ASSISTANCE.

EYE CONTACT:  
WASH WITH LARGE AMOUNTS OF WATER. OBTAIN FIRST AID AND MEDICAL ASSISTANCE, IF NEEDED.

INGESTION:  
CALL POISON CONTROL CENTER, HOSPITAL EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY.

## SECTION 5. FIRE FIGHTING MEASURES

FIGHTING PROCEDURES: NOT APPLICABLE

HAZARDOUS PRODUCTS/COMBUSTION: NONE.

HAZARD RATING SOURCE:  
NFPA:  
HEALTH 1  
FLAMMABILITY 0  
REACTIVITY 0  
OTHER

## SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP: FOLLOW NORMAL CLEAN UP PROCEDURES.

## SECTION 7. HANDLING AND STORAGE

## HANDLING:

ALWAYS HANDLE AND STORE WHEELS IN A CAREFUL MANNER.  
ALWAYS VISUALLY INSPECT ALL WHEELS BEFORE MOUNTING.  
ALWAYS CHECK MACHINE SPEED AGAINST THE ESTABLISHED MAXIMUM SAFE OPERATING SPEED MARKED ON THE WHEEL.  
ALWAYS CHECK MOUNTING FLANGES FOR EQUAL AND CORRECT DIAMETER.  
ALWAYS USE MOUNTING BLOTTERS.  
ALWAYS BE SURE WORK REST IS PROPERLY ADJUSTED.  
ALWAYS USE A SAFETY GUARD COVERING AT LEAST ONE-HALF OF THE GRINDING WHEEL.  
ALWAYS ALLOW NEWLY MOUNTED WHEELS TO RUN AT OPERATING SPEED, WITH GUARD IN PLACE, FOR AT LEAST ONE MINUTE BEFORE GRINDING.  
ALWAYS TURN OFF COOLANT BEFORE STOPPING WHEEL TO AVOID CREATING AN OUT-OF-BALANCE WHEEL.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## VENTILATION PROTECTION:

RECOMMEND USING LOCAL EXHAUST VENTILATION WHEN GENERAL VENTILATION IS NOT KEEPING THE AIRBORNE CONCENTRATION BELOW THE TLV.

## RESPIRATORY PROTECTION:

RESPIRATORS ARE REQUIRED WHEN AIRBORNE CONTAMINANT LEVELS EXCEED THE TLV(S).

## EYE PROTECTION:

ALWAYS WEAR SAFETY GLASSES OR SOME TYPE OF EYE PROTECTION WHEN GRINDING.

## OTHER PROTECTION:

USE OF THIS PRODUCT MAY CREATE ELEVATED SOUND LEVELS. HEARING PROTECTION SHOULD BE WORN WHERE REQUIRED (SEE OSHA 29 CFR 1910.134 AND OTHER APPLICABLE REGULATIONS).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE &amp; ODOR: SOLID ARTICLE. ODORLESS.

## SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES: AVOID ACIDS OF ALL TYPES WITH A pH &lt; 4.0.

## DECOMPOSITION:

IN USE, DUST AND DECOMPOSING ODORS MAY BE GENERATED. IN MOST CASES, THE MATERIAL REMOVED FROM THE WORKPLACE WILL BE SIGNIFICANTLY GREATER THAN THE GRINDING WHEEL COMPONENTS. COOLANTS MAY PRODUCE OTHER DECOMPOSITION PRODUCTS.

FOR PRODUCTS CONTAINING PHENOL AND FORMALDEHYDE RESIN, THERMAL DECOMPOSITION MAY PRODUCE TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE.  
FOR PRODUCTS CONTAINING INORGANIC FLUORIDES, THERMAL DECOMPOSITION MAY PRODUCE TRACE AMOUNTS OF FLUORIDES.

## SECTION 11. TOXICOLOGICAL INFORMATION

## CARCINOGENICITY:

FOR WHEELS CONTAINING FIBERGLASS, FIBER DIAMETERS ARE GREATER THAN 10 (MICRO)M, THEREFORE CONSIDERED NON-RESPIRABLE.  
FIBERGLASS - IARC-3

LD50/LC50: VALUES ARE NOT APPROPRIATE OR AVAILABLE.

## SECTION 12. ECOLOGICAL INFORMATION

## CHEMICAL FATE:

RESIN BONDED MATERIALS DEMONSTRATE SIMILAR DEGRADATION RATES AS PHENOLIC PLASTICS.  
VITRIFIED PRODUCTS DO NOT APPRECIABLY DECAY.

## SECTION 13. DISPOSAL CONSIDERATIONS

## WASTE DISPOSAL:

USE STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS.  
PRODUCTS WITH LISTED FLUORIDES MAY HAVE SLIGHTLY SOLUBLE FLUORIDE SWARP.

RECYCLING PROGRAM - THE COMPANY HAS DEVELOPED A GRINDING WHEEL RECYCLING PROGRAM. IF YOU ARE INTERESTED IN RETURNING YOUR STUBS, INFORMATION CAN BE OBTAINED BY DIALING CUSTOMER SERVICE.

## SECTION 14. TRANSPORT INFORMATION

HAZARD CLASS: N/A

## SECTION 15. REGULATORY INFORMATION

## EXPOSURE LIMITS/REGULATORY INFORMATION:

SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MCL
ALUMINUM OXIDE, NON-FIBROUS	MG/M3	15.0000	10.0000	10.0000
CURED PHENOL FORMALDEHYDE RESIN	PPM	0.0000	0.0000	0.0000
FIBERGLASS	FBR/CC	1.0000	0.0000	0.0000
SILICON CARBIDE	MG/M3	10.0000	10.0000	10.0000

ZIRCONIUM OXIDE MG/M3 5.0000 5.0000 5.0000

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS:

CA PROP 65: NOT APPLICABLE

ON 8(B) - INVENTORY STATUS:  
COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE  
TOXIC SUBSTANCE CONTROL ACT.

DOMESTIC SUBSTANCE LIST:

SECTION 16. OTHER INFORMATION

DISCLAIMER:

THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE TAKEN FROM SOURCES  
BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF; HOWEVER, THE COMPANY MAKES  
NO WARRANTY WITH RESPECT TO THE ACCURACY OF THE INFORMATION OR THE  
SUITABILITY OF THE RECOMMENDATIONS, AND ASSUMES NO LIABILITY TO ANY USER  
THEREOF.

KEY TO ABBREVIATIONS:

BQ=EQUAL  
LT=LESS THAN  
GT=GREATER THAN  
AP=APPROXIMATELY  
TR=TRACE  
ND=NO DATA AVAILABLE

ORDER: 1033300054

ITEM: 5YK76 - Cleaner Brake Parts

HAZMAT: 5YK76

HAZARD MATERIAL WARNING SHEET (HAZMAT)

When shipment is complete, retain for daily Hazmat audit

GRAINGER SHIPPING INFORMATION

STOCK # : 5YK76  
MSDS # : A6508, A9252  
FREIGHT CODE : 0811  
DOT PROPER SHIP NAME : CONSUMER COMMODITY, ORM-D FLASHPOINT -18 DGS C, 0  
DGS F

FLASHPOINT : -18 DEGREES CELSIUS, 0 DEGREES FAHRENHEIT

UPS RESTRICTIONS :

HAZARDOUS CLASS NUMBER : ORM-D  
UN ID # :  
PACKING GROUP :  
SHIPPING LABEL : Consumer Commodity ORM-D

LIMITED QUANTITY : YES  
CARTON INSTRUCTIONS : CAN REPACK IN GRAINGER S CARTON  
DOT/UPS EXEMPTION NO. :  
COMMENTS : HAZARDOUS MATERIAL. DO NOT SHIP AIR!!  
SHIPPING-PAPERS :

SLACARD OFFERED ? YES ( ) NO ( ) PLEASE MARK ONE

## ITEM: 5YK76 - Cleaner Brake Parts

PICK REQ: 1033300054

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A9252

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A9252

Associated Grainger Item: 5YK76 - Cleaner Brake Parts

## MATERIAL SAFETY DATA SHEET

## SECTION 1: PRODUCT &amp; COMPANY IDENTIFICATION

PRODUCT NAME: BRAKLEEN(R\*) BRAKE PARTS CLEANER - NON-CHLORINATED

PRODUCT NUMBER (S): 05084, 05084-2

MANUFACTURED BY:  
CRC INDUSTRIES, INC.  
885 LOUIS DRIVE  
WARMINSTER, PA 18974

(215) 674-4300

24-HOUR EMERGENCY INFORMATION:  
CHEMTREC: (800) 424-9300

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
TOLUENE	108-88-3	100 PPM	100 PPM	NE	22-32
METHANOL	67-56-1	200 PPM	200 PPM	NE	15-25
ACETONE	67-64-1	750 PPM	750 PPM	NE	45-55
CARBON DIOXIDE	124-38-9	5000 PPM	10000 PPM	NE	<10
DIMETHOXYPROPANE	77-76-9	NE	NE	NE	<5

## SECTION 3: HAZARDS IDENTIFICATION

## EMERGENCY OVERVIEW:

APPEARANCE &amp; ODOR: CLEAR, WATER-WHITE LIQUID.

DANGER:  
EXTREMELY FLAMMABLE. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED EYE AND SKIN IRRITANT. CONTENTS UNDER PRESSURE.

## ENVIRONMENTAL HEALTH EFFECTS:

INHALATION:  
DIZZINESS, BREATHING DIFFICULTIES, ANESTHETIC EFFECTS, NAUSEA AND IRRITATION TO RESPIRATORY TRACT.

EYES: IRRITATION

SKIN: IRRITATION, DEFATTING

INGESTION: NA

## CARCINOGENICITY:

OSHA: NO  
IARC: NO  
NTP: NOCHRONIC OVEREXPOSURE:  
CONTACT DERMATITIS. CHRONIC OVEREXPOSURE MAY CAUSE NERVOUS SYSTEM DAMAGE.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: BREATHING PROBLEMS.

## SECTION 4: FIRST AID MEASURES

INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NECESSARY.

EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.

SKIN: REMOVE CONTAMINATED CLOTHING AND WASH AREA WITH SOAP AND WATER.

INGESTION: CALL A PHYSICIAN. DO NOT INDUCE VOMITING.

## SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT: &lt;0 DEG. F

METHOD: TCC

LEL: 1.0  
UEL: 13.0

EXTINGUISHING MEDIA: CO2, FOAM AND FOG

HAZARDOUS COMBUSTION PRODUCTS: CO2, CARBON MONOXIDE

## FIRE-FIGHTING INSTRUCTIONS:

REMOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. USE SELF-CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING. AEROSOL CANS MAY EXPLODE IF HEATED ABOVE 120 DEG. F.

NFPA:  
HEALTH 2  
FLAMMABILITY 3  
REACTIVITY 0HMIS:  
HEALTH 2FLAMMABILITY 3  
REACTIVITY 0  
PPE B

## SECTION 6: ACCIDENTAL RELEASE MEASURES

## SPILL/LEAK PROCEDURES:

USUALLY NOT A PROBLEM WITH AEROSOLS. AREA SHOULD BE VENTILATED. ABSORBENT SHOULD BE USED TO PICK UP EXCESS MATERIAL. ALL USED AND UNUSED PRODUCT SHOULD BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## SECTION 7: HANDLING AND STORAGE

## HANDLING PROCEDURES:

STORE IN A COOL, DRY AREA. AEROSOL CANS MUST BE MAINTAINED BELOW 120 DEG. F TO PREVENT CANS FROM EXPLODING.

AEROSOL LEVEL: III

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## ENGINEERING CONTROLS:

ADEQUATE TO PREVENT ACCUMULATION OF VAPORS. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN LEVELS BELOW THE EXPOSURE LIMITS. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

## RESPIRATORY:

USE NIOSH/MSHA COMPLIANT RESPIRATORS OR SELF-CONTAINED BREATHING APPARATUS ABOVE EXPOSURE LIMITS. FOLLOW OSHA REGULATIONS 29 CFR 1910.134.

## PROTECTIVE CLOTHING/EQUIPMENT:

WEAR CHEMICALLY PROTECTIVE GLOVES AND SAFETY GLASSES. USE A SPLASH APRON AND BOOTS IF SPLASHING OCCURS.

## SECTION 9: PHYSICAL &amp; CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID

SPECIFIC GRAVITY: 0.815

FREEZING POINT: ND

EVAPORATION RATE: FAST

PH: NA

APPEARANCE &amp; ODOR: CLEAR, WATER-WHITE LIQUID

BOILING POINT: 131 DEG. F (INITIAL)

VAPOR PRESSURE: ND

VAPOR DENSITY (AIR = 1): ND

SOLUBILITY: PARTIALLY SOLUBLE IN WATER. SOLUBLE IN MOST ORGANIC LIQUIDS.

VOLATILE ORGANIC COMPOUNDS %: 45

G/L: 366

LBS./GAL: 3.0

## SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: NO

CHEMICAL INCOMPATIBILITIES: STRONG OXIDIZERS.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS AND SOURCES OF IGNITION.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

## SECTION 11: TOXICOLOGICAL INFORMATION

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. SEE SECTION 3 OF THIS MSDS FOR ACUTE SYMPTOMS OF OVEREXPOSURE AND CARCINOGENICITY INFORMATION.

## SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: NO DATA AVAILABLE.

ENVIRONMENTAL FATE: NO DATA AVAILABLE FOR BIODEGRADATION.

## SECTION 13: DISPOSAL CONSIDERATIONS

## DISPOSAL:

THIS MATERIAL IF DISCARDED MAY BE HAZARDOUS WASTE UNDER U.S. EPA RCRA REGULATIONS. ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT YOUR LOCAL OR STATE ENVIRONMENTAL AGENCY FOR SPECIFIC RULES. DO NOT DUMP INTO SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.

## SECTION 14: TRANSPORTATION INFORMATION

SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

UN NUMBER: NA  
PACKING GROUP: NA  
LABEL: NA  
PLACARD: NA  
SPECIAL PROVISIONS: NA

---

SECTION 15: REGULATORY INFORMATION

---

TSCA: ALL COMPONENTS ARE EITHER LISTED UNDER TSCA OR ARE EXEMPT.

SARA TITLE III:

SECTION 311/312: ACUTE, PRESSURE, FIRE

SECTION 313\*: TOLUENE, METHANOL

CERCLA/SUPERFUND (RQ): MIXTURE

EXTREMELY HAZARDOUS SUBSTANCES: NO

CALIFORNIA PROP 65:  
THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE  
CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

\* SEE SECTION 2 FOR PERCENTAGE

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SECTION 16: ADDITIONAL INFORMATION

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PREPARED BY: MICHELLE RUDNICK

DATE: NOVEMBER 16, 2005

TECHNICAL INFORMATION: (800) 521-3168

CRC #: 594M-Q

THIS INFORMATION IS ACCURATE TO THE BEST OF CRC INDUSTRIES' KNOWLEDGE OR  
OBTAINED FROM SOURCES BELIEVED BY CRC TO BE ACCURATE. BEFORE USING ANY  
PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

CAS: CHEMICAL ABSTRACT SERVICE  
PPM: PARTS PER MILLION  
TCC: TAG CLOSED CUP  
LEL: LOWER EXPLOSIVE LIMIT  
UEL: UPPER EXPLOSIVE LIMIT  
PPE: PERSONAL PROTECTION EQUIPMENT  
COC: CLEVELAND CLOSED CUP  
NA: NOT APPLICABLE  
ND: NOT DETERMINED  
NE: NOT ESTABLISHED  
G/L: GRAMS PER LITER  
LBS./GAL: POUNDS PER GALLON  
RQ: REPORTABLE QUANTITY

## MATERIAL SAFETY DATA SHEET (MSDS)

This MSDS should be attached or kept with the respective product with which it is associated.

SAFETY DATA SHEET - A1812

Associated Grainger Items

2F139

MATERIAL SAFETY DATA SHEET

## SECTION 1: PRODUCT &amp; COMPANY IDENTIFICATION

PRODUCT NAME: CHAIN &amp; WIRE ROPE LUBE AEROSOL

PRODUCT NUMBER(S): 03050, 73050, 03050

MANUFACTURED BY:

CRC INDUSTRIES, INC.

885 LOUIS DRIVE

WARMINSTER, PA 18974

(215) 674-4300

24-HOUR EMERGENCY INFORMATION:

CHEMTREC: (800) 424-9300

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
ACRYLIC COPOLYMER	68171-50-6	NE	NE	NE	<5
ORGANO MOLYBDENUM	68958-92-9	NE	NE	NE	<5
HEPTANE	142-82-5	400 PPM	400 PPM	NE	60-70
PROPANE	74-98-6	NE	1000 PPM	NE	10-20
ISOBUTANE	75-28-5	NE	NE	1000 PPM	10-20

## SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE &amp; ODOR: LIGHT AMBER CLEAR LIQUID, SOLVENT ODOR.

DANGER:

EXTREMELY FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. CONTENTS UNDER PRESSURE.

TIAL HEALTH EFFECTS:

HMIS:

HEALTH 2

FLAMMABILITY 4

INHALATION: HEADACHES, DIZZINESS, ANESTHESIA AND UNCONSCIOUSNESS.

EYES: IRRITATION

SKIN: IRRITATION

INGESTION: NA

CARCINOGENICITY:

OSHA: NO

IARC: NO

NTP: NO

CHRONIC OVEREXPOSURE:

REPEATED OVEREXPOSURE MAY CAUSE HARM TO THE NERVOUS SYSTEM.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: PRE-EXISTING LUNG PROBLEMS.

## SECTION 4: FIRST AID MEASURES

INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NECESSARY.

EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.

SKIN: REMOVE CONTAMINATED CLOTHING AND WASH AREA WITH SOAP AND WATER.

INGESTION: CALL A PHYSICIAN. DO NOT INDUCE VOMITING.

## SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT: &lt;20 DEG. F

METHOD: TCC

LEL: 1.8

UEL: 9.5

EXTINGUISHING MEDIA: CO2, DRY CHEMICAL AND FOAM

HAZARDOUS COMBUSTION PRODUCTS: THERMAL - CARBON MONOXIDE AND CARBON DIOXIDE

FIRE-FIGHTING INSTRUCTIONS:

REMOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. USE SELF-CONTAINED BREATHING

APPARATUS FOR FIRE FIGHTING. AEROSOL CANS MAY EXPLODE IF HEATED ABOVE

120 DEG. F

NFPA:

HEALTH 2

FLAMMABILITY 4

REACTIVITY 0

VAPOR DENSITY (AIR = 1): 4.5

pH: NA

REACTIVITY 0  
PPE B

SECTION 6: ACCIDENTAL RELEASE MEASURES -----

SPILL/LEAK PROCEDURES:

USUALLY NOT A PROBLEM WITH AEROSOLS. AREA SHOULD BE VENTILATED. ABSORBENT SHOULD BE USED TO PICK UP EXCESS MATERIAL. ALL USED AND UNUSED PRODUCT SHOULD BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

HANDLING PROCEDURES:

STORE IN A COOL, DRY AREA. AEROSOL CANS MUST BE MAINTAINED BELOW 120 DEG. F TO PREVENT CANS FROM EXPLODING.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

ADEQUATE TO PREVENT ACCUMULATION OF VAPORS. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN LEVELS BELOW THE EXPOSURE LIMITS. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

RESPIRATORY:

NIOSH/MSHA COMPLIANT RESPIRATORS OR SELF-CONTAINED BREATHING APPARATUS  
EXPOSURE LIMITS. FOLLOW OSHA REGULATIONS 29 CFR 1910.134.

PROTECTIVE CLOTHING/EQUIPMENT:

WEAR CHEMICALLY PROTECTIVE GLOVES AND SAFETY GLASSES. USE A SPLASH APRON AND BOOTS IF SPLASHING OCCURS.

-----SECTION 9: PHYSICAL & CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

APPEARANCE & ODOR: LIGHT AMBER CLEAR LIQUID, SOLVENT ODOR.

SPECIFIC GRAVITY: 0.7135

BOILING POINT: 209 DEG. F

FREEZING POINT: ND

VAPOR PRESSURE: ND

EVAPORATION RATE: NA

PLACARD: NA

SPECIAL PROVISIONS: NA

-----SECTION 15: REGULATORY INFORMATION -----

TSCA: ALL COMPONENTS ARE EITHER LISTED UNDER TSCA OR ARE EXEMPT.

SOLUBILITY: NOT SOLUBLE IN WATER.

VOLATILE ORGANIC COMPOUNDS:

%: 92.1

G/L: 599

LBS./GAL: 5

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: NO

CHEMICAL INCOMPATIBILITIES: STRONG OXIDIZERS.

MATERIALS TO AVOID: STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT.  
SEE SECTION 3 OF THIS MSDS FOR ACUTE SYMPTOMS OF OVEREXPOSURE AND CARCINOGENICITY INFORMATION.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICITY: NO DATA AVAILABLE.

ENVIRONMENTAL FATE: NO DATA AVAILABLE FOR BIODEGRADATION.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

DISPOSAL:

THIS MATERIAL IF DISCARDED MAY BE HAZARDOUS WASTE UNDER U.S. EPA RCRA REGULATIONS. ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT YOUR LOCAL OR STATE ENVIRONMENTAL AGENCY FOR SPECIFIC RULES. DO NOT DUMP INTO SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.

-----SECTION 14: TRANSPORTATION INFORMATION -----

SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

UN NUMBER: NA

PACKING GROUP: NA

LABEL: NA

PREPARED BY: ADAM M. SELISKER

DATE: JULY 5, 2001

TECHNICAL INFORMATION: (800) 521-3168

CRC #: 572C

SARA TITLE III:

SECTION 311/312: ACUTE, PRESSURE

SECTION 313\*: NONE

..... SUPERFUND (RQ): NA

EXTREMELY HAZARDOUS SUBSTANCES: NO

CALIFORNIA PROP 65:

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE  
CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

\* SEE SECTION 2 FOR PERCENTAGE

-----SECTION 16: ADDITIONAL INFORMATION -----

THIS INFORMATION IS ACCURATE TO THE BEST OF CRC INDUSTRIES' KNOWLEDGE OR  
OBTAINED FROM SOURCES BELIEVED BY CRC TO BE ACCURATE. BEFORE USING ANY  
PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

CAS: CHEMICAL ABSTRACT SERVICE

PPM: PARTS PER MILLION

TCC: TAG CLOSED CUP

LEL: LOWER EXPLOSIVE LIMIT

UEL: UPPER EXPLOSIVE LIMIT

PPE: PERSONAL PROTECTION EQUIPMENT

NA: NOT APPLICABLE

ND: NOT DETERMINED

NE: NOT ESTABLISHED

G/L: GRAMS PER LITER

LBS./GAL: POUNDS PER GALLON

RQ: REPORTABLE QUANTITY

## ITEM: 1D264 - DEGREASING SOLVENT

PICK REQ: 0180644121

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A3237

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A3237

Associated Grainger Item: 1D264 - DEGREASING SOLVENT

## MATERIAL SAFETY DATA SHEET

## SECTION 1: PRODUCT &amp; COMPANY IDENTIFICATION

PRODUCT NAME: **HEAVY DUTY DEGREASER II, AEROSOL**

PRODUCT NUMBER(S): 03120, 73120

MANUFACTURED BY: CRC INDUSTRIES, INC.  
885 LOUIS DRIVE  
WARMINSTER, PA 18974  
(215) 674-4300

24 HR. EMERGENCY INFORMATION:  
CHEMTREC: (800) 424-9300

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
DIPROPYLENE GLYCOL METHYL ETHER	34590-94-8	100 PPM	100 PPM	NE	20-40
PETROLEUM DISTILLATE	64742-88-7	NE	400 PPM	100 PPM	5-15
CARBON DIOXIDE	124-38-9	5000 PPM	10000 PPM	NE	2-4
DPM ACETATE	88917-22-0	NE	NE	NE	10-20
PETROLEUM DISTILLATE	64771-72-8	NE	NE	100 PPM	30-50
PETROLEUM DISTILLATE	64742-48-9	NE	400 PPM	300 PPM	5-15

## SECTION 3: HAZARDS IDENTIFICATION

## EMERGENCY OVERVIEW:

APPEARANCE & ODOR:  
CLEAR LIQUID WITH SLIGHT ODOR.

## DANGER:

FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. CONTENTS UNDER PRESSURE.

## INITIAL HEALTH EFFECTS:

INHALATION:  
IRRITATION TO RESPIRATORY TRACT AND CENTRAL NERVOUS SYSTEM EFFECTS.

EYES:  
NA

SKIN:  
NA

INGESTION:  
NA

CARCINOGENICITY:  
OSHA: NO  
IARC: NO  
NTP: NO

CHRONIC OVEREXPOSURE:  
NONE KNOWN TO HUMANS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:  
NA

## SECTION 4: FIRST AID MEASURES

INHALATION:  
REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NECESSARY.

EYES:  
FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.

SKIN:  
REMOVE CONTAMINATED CLOTHING AND WASH AREA WITH SOAP AND WATER.

INGESTION:  
CALL A PHYSICIAN. DO NOT INDUCE VOMITING.

## SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT: 142 DEG. F

METHOD: TCC

LEL: 1.1  
14.0

EXTINGUISHING MEDIA:  
WATER FOG OR CO2, AND DRY CHEMICAL

HAZARDOUS COMBUSTION PRODUCTS:  
CO, CO2

FIRE-FIGHTING INSTRUCTIONS:  
REMOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. USE SELF-CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING. AEROSOL CANS MAY EXPLODE IF HEATED ABOVE 120

DEG. F.

NFPA:  
HEALTH: 1  
FLAMMABILITY: 2  
REACTIVITY: 0

HMIS:  
HEALTH: 1  
FLAMMABILITY: 2  
REACTIVITY: 0  
PPE: B

## SECTION 6: ACCIDENTAL RELEASE MEASURES

## SPILL/LEAK PROCEDURES:

USUALLY NOT A PROBLEM WITH AEROSOLS. AREA SHOULD BE VENTILATED. ABSORBENT SHOULD BE USED TO PICK UP EXCESS MATERIAL. ALL USED AND UNUSED PRODUCT SHOULD BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## SECTION 7: HANDLING AND STORAGE

## HANDLING PROCEDURES:

STORE IN A COOL, DRY AREA. AEROSOL CANS MUST BE MAINTAINED BELOW 120 DEG. F TO PREVENT CANS FROM EXPLODING.

AEROSOL LEVEL: III

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## ENGINEERING CONTROLS:

ADEQUATE TO PREVENT ACCUMULATION OF VAPORS. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN LEVELS BELOW THE EXPOSURE LIMITS. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

## RESPIRATORY:

USE NIOSH/MSHA COMPLIANT RESPIRATORS OR SELF-CONTAINED BREATHING APPARATUS ABOVE EXPOSURE LIMITS. FOLLOW OSHA REGULATIONS 29 CFR 1910.134.

## PROTECTIVE CLOTHING/EQUIPMENT:

WEAR CHEMICALLY PROTECTIVE GLOVES AND SAFETY GLASSES. USE A SPLASH APRON AND BOOTS IF SPLASHING OCCURS.

## SECTION 9: PHYSICAL &amp; CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID

APPEARANCE & ODOR: CLEAR LIQUID, SLIGHT ODOR

SPECIFIC GRAVITY: 0.83

BOILING POINT: > 375 DEG. F

FREEZING POINT: NA

VAPOR PRESSURE: 5 MM @ 25 DEG. C

EVAPORATION RATE: SLOW

VAPOR DENSITY (AIR=1): > 5

PH: NA

SOLUBILITY: SLIGHT

VOLATILE ORGANIC COMPOUNDS  
%: 86.0  
G/L: 715  
LBS/GAL: 5.96

## SECTION 10: STABILITY AND REACTIVITY

STABILITY:  
STABLE

HAZARDOUS POLYMERIZATION:  
NO

CHEMICAL INCOMPATIBILITIES:  
STRONG OXIDIZERS.

MATERIALS TO AVOID:  
STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:  
NONE

## SECTION 11: TOXICOLOGICAL INFORMATION

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. SEE SECTION 3 OF THIS MSDS FOR ACUTE SYMPTOMS OF OVEREXPOSURE AND CARCINOGENICITY INFORMATION.

## SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:  
NO DATA AVAILABLE.

ENVIRONMENTAL FATE:  
NO DATA AVAILABLE FOR BIODEGRADATION.

## SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL:  
THIS MATERIAL IF DISCARDED MAY BE HAZARDOUS WASTE UNDER U.S. EPA RCRA REGULATIONS. ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT YOUR LOCAL OR STATE ENVIRONMENTAL AGENCY FOR SPECIFIC RULES. DO NOT DUMP INTO SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.

SECTION 14: TRANSPORTATION INFORMATION

PRODUCT NAME: CONSUMER COMMODITY  
HAZARD CLASS: ORM-D  
UN NUMBER: NA  
PACKING GROUP: NA  
LABEL: NA  
PLACARD: NA  
SPECIAL PROVISIONS: NA

SECTION 15: REGULATORY INFORMATION

TSCA:  
ALL COMPONENTS ARE EITHER LISTED UNDER TSCA OR ARE EXEMPT.

SARA TITLE III:  
SECTION 311/312: ACUTE, PRESSURE  
SECTION 313\*: NONE

CERCLA SUPERFUND (RQ): NA

EXTREMELY HAZARDOUS SUBSTANCES: NO

CALIFORNIA PROP. 65:  
THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

\* SEE SECTION 2 FOR PERCENTAGE.

SECTION 16: ADDITIONAL INFORMATION

PREPARED BY: ADAM M. SELISKER

DATE: MARCH 13, 2002

TECHNICAL INFORMATION: (800) 521-3168

CRC #: 490A

THIS INFORMATION IS ACCURATE TO THE BEST OF CRC INDUSTRIES' KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED BY CRC TO BE ACCURATE. BEFORE USING ANY PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

CHEMICAL ABSTRACT SERVICE  
PARTS PER MILLION  
TAG CLOSED CUP  
LEL: LOWER EXPLOSIVE LIMIT  
UEL: UPPER EXPLOSIVE LIMIT  
PPE: PERSONAL PROTECTION EQUIPMENT  
COC: CLEVELAND OPEN CUP  
NA: NOT APPLICABLE  
ND: NOT DETERMINED  
NE: NOT ESTABLISHED  
G/L: GRAMS PER LITER  
LBS/GAL: POUNDS PER GALLON  
RQ: REPORTABLE QUANTITY

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*

SAFETY DATA SHEET - A0485

ociated Grainger Items

4KL98, 4KL99, 5E205

LOCTITE CORPORATION

01/

30/00

ROCKY HILL, CONNECTICUT 06067

EMERGENCY PHONE: (860) 571-5100

OF 07

QUICK SET (TM) 404 INSTANT ADHESIVE

46551

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ITEM NO.: 46551

PRODUCT TYPE: CYANOACRYLATE ESTER

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NO.	%
ETHYL CYANOACRYLATE	7085-85-0	90-95
POLY (METHYL METHACRYLATE)	9011-14-7	5-10
HYDROQUINONE	123-31-9	0.1-1

INGREDIENTS WHICH HAVE EXPOSURE LIMITS

EXPOSURE LIMITS (TWA)	ACGIH	OSHA	OTHER
INGREDIENTS	(TLV)	(PEL)	
ETHYL CYANOACRYLATE	0.2 PPM TWA	NONE	NONE
HYDROQUINONE	2 MG/M3 TWA	2 MG/M3 TWA	2 MG/M3 TWA
			4 MG/M3 STEL

EXPOSURE LIMITS (STEL)	ACGIH	OSHA
INGREDIENTS	(TLV)	(PEL)

3. HAZARDS IDENTIFICATION

TOXICITY: SKIN CONTACT MAY CAUSE BURNS.  
BONDS SKIN RAPIDLY AND STRONGLY.  
SKIN AND EYE IRRITANT.  
ESTIMATED ORAL LD50 MORE THAN 5000MG/KG.  
ESTIMATED DERMAL LD 50 MORE THAN 2000 MG/KG.

PRIMARY ROUTES OF ENTRY: NONE KNOWN

SIGNS AND SYMPTOMS

OF EXPOSURE: VAPOR IS IRRITATING TO EYES AND MUCOUS MEMBRANES  
ABOVE TLV. PROLONGED AND REPEATED OVEREXPOSURE

TO

VAPORS MAY PRODUCE SYMPTOMS OF NON-ALLERGIC  
ASTHMA IN SENSITIVE INDIVIDUALS.

EXISTING CONDITIONS

AGGRAVATED BY EXPOSURE: NONE KNOWN

INGREDIENTS	LITERATURE REFERENCED	CARCINOGEN
	TARGET ORGAN AND OTHER HEALTH EFFECTS	NTP IARC

OSHA

ETHYL CYANOACRYLATE	ALG IRR RES	NO NO NO
POLY (METHYL METHACRYLATE)	IRR	NO N/A NO

LOCTITE CORPORATION 01/

30/00

ROCKY HILL, CONNECTICUT 06067

EMERGENCY PHONE: (860) 571-5100

ITEM NO.: 46551

3. HAZARDS IDENTIFICATION

CONTINUED)

HYDROQUINONE AC3 BLO BNM CNS EYE IMM IRR LIV NO N/A NO

## ABBREVIATIONS

A NOT APPLICABLE	AC3 ACGIH ANIMAL CARCINOGEN.
ALG ALLERGEN	BLO BLOOD
BNM BONE MARROW	CNS CENTRAL NERVOUS SYSTEM
EYE EYES	IMM IMMUNE SYSTEM
IRR IRRITANT	LIV LIVER
MUT MUTAGEN	RES RESPIRATORY
SKI SKIN	THY THYROID

## 4. FIRST AID MEASURES

FOR

EMERGENCY PROCEDURES.

INHALATION: REMOVE TO FRESH AIR. IF SYMPTOMS PERSIST,  
OBTAIN MEDICAL ATTENTION.

EMERGENCY PROCEDURES.

EMERGENCY PROCEDURES.

## 5. FIRE FIGHTING MEASURES

FLASH POINT: 150 - 200F METHOD: TAG CLOSED CUP

## RECOMMENDED

EXTINGUISHING AGENTS: CARBON DIOXIDE, FOAM, DRY CHEMICAL

## SPECIAL FIREFIGHTING

PROCEDURES: NOT AVAILABLE

## HAZARDOUS PRODUCTS FORMED

BY FIRE OR THERMAL DECOMP IRRITATING ORGANIC VAPORS

## UNUSUAL FIRE OR

EXPLOSION HAZARDS: NONE

## EXPLOSIVE LIMITS:

BY VOLUME IN AIR) LOWER NOT AVAILABLE

BY VOLUME IN AIR) UPPER NOT AVAILABLE

## 6. ACCIDENTAL RELEASE MEASURES

## STEPS TO BE TAKEN IN CASE

OF SPILL OR LEAK: FLOOD WITH WATER TO POLYMERIZE COMPLETELY. SOAK  
UP WITH AN INERT ABSORBENT.

LOCTITE CORPORATION

01/

30/00

ROCKY HILL, CONNECTICUT 06067

EMERGENCY PHONE: (860) 571-5100

OF 07

ITEM NO.: 46551

## 7. HANDLING AND STORAGE

SAFE STORAGE: STORE AT OR BELOW 75 DEG. F

(CONTACT LOCTITE CUSTOMER SERVICE 1-800-243-4874 FOR SHELF LIFE

## INFORMATION)

HANDLING: AVOID CONTACT WITH SKIN AND EYES. AVOID

## BREATHING

VAPOR.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EYES: SAFETY GLASSES OR GOGGLES.

SKIN: NITRILE OR POLYETHYLENE GLOVES AND APRONS.

DO NOT USE COTTON.

VENTILATION: POSITIVE DOWN-DRAFT EXHAUST VENTILATION SHOULD BE

PROVIDED TO MAINTAIN VAPOR CONCENTRATION BELOW

TLV.

RESPIRATORY NOT AVAILABLE

SEE SECTION 2 FOR EXPOSURE LIMITS.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: CLEAR LIQUID

ODOR: PUNGENT

BOILING POINT: MORE THAN 300F  
PH: DOES NOT APPLY  
SOLUBILITY IN WATER: POLYMERIZED BY WATER.  
SPECIFIC GRAVITY 1.09 AT 75F  
VOLATILE ORGANIC COMPOUND  
(EPA METHOD 24) 93.0%; 1013.7 G/L  
VAPOR PRESSURE: LESS THAN 0.2MM  
VAPOR DENSITY: APPROXIMATELY 3  
EVAPORATION RATE  
(ETHER = 1) NOT AVAILABLE

10. STABILITY AND REACTIVITY

STABILITY: STABLE  
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR  
INCOMPATIBILITY: POLYMERIZED BY CONTACT WITH WATER, ALCOHOLS,  
AMINES, ALKALIES.  
CONDITIONS TO AVOID: NOT AVAILABLE

HAZARDOUS DECOMPOSITION

PRODUCTS (NON-THERMAL): NONE

11. TOXICOLOGICAL INFORMATION

SEE SECTION 3.

LOCTITE CORPORATION

01/

30/00

ROCKY HILL, CONNECTICUT 06067  
EMERGENCY PHONE: (860) 571-5100

OF 07

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12. ECOLOGICAL INFORMATION

NO DATA AVAILABLE

13. DISPOSAL CONSIDERATIONS

COMMENDED METHODS OF

DISPOSAL: POLYMERIZE AS ABOVE. INCINERATE IN ACCORDANCE

TH

EPA AND LOCAL REGULATIONS.

EPA HAZARDOUS WASTE

NUMBER NH - NOT A RCRA HAZARDOUS WASTE MATERIAL

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)

DOMESTIC GROUND TRANSPORT

PROPER SHIPPING NAME: UNRESTRICTED (NOT MORE THAN 450 LITERS);  
COMBUSTIBLE LIQUIDS, N.O.S. (CYANOACRYLATE ESTER)  
(MORE THAN 450 LITERS)

HAZARD CLASS OR

DIVISION: UNRESTRICTED (NOT MORE THAN 450 LITERS)  
COMBUSTIBLE LIQUID (MORE THAN 450 LITERS)

IDENTIFICATION NUMBER: NONE (NOT MORE THAN 450 LITERS);  
NA 1993 (MORE THAN 450 LITERS)

MARINE POLLUTANT: NONE

IATA

PROPER SHIPPING NAME: UNRESTRICTED (NOT MORE THAN ONE PINT);  
AVIATION REGULATED LIQUID, N.O.S., (CYANOACRYLATE  
ESTER) (MORE THAN ONE PINT)

CLASS OR DIVISION: UNRESTRICTED (NOT MORE THAN ONE PINT);  
CLASS 9 (MORE THAN ONE PINT)

UN OR ID NUMBER: NONE (NOT MORE THAN ONE PINT)  
UN 3334 (MORE THAN ONE PINT)

REGULATORY INFORMATION

CA PROPOSITION 65: NOT AVAILABLE

16. OTHER INFORMATION

ESTIMATED NFPA(R) CODE:

HEALTH HAZARD: 2

FIRE HAZARD: 2  
REACTIVITY HAZARD: 1  
SPECIFIC HAZARD: DOES NOT APPLY  
ESTIMATED HMIS (R) CODE:  
HEALTH HAZARD: 2  
FLAMMABILITY HAZARD: 2  
REACTIVITY HAZARDS: 1

LOCTITE CORPORATION

01/

30/00

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16. OTHER INFORMATION

CONTINUED)

PERSONAL PROTECTION: SEE SECTION 8.

NFPA IS A REGISTERED TRADEMARK OF THE NATIONAL FIRE PROTECTION ASSN.

HMIS IS A REGISTERED TRADEMARK OF THE NATIONAL PAINT AND COATINGS

ASSN.

PREPARED BY: STEPHEN REPETTO

TITLE: RESEARCH CHEMIST, ENVIRONMENTAL HEALTH & SAFETY

COMPANY: LOCTITE CORP., 1001 TR BR CR, ROCKY HILL CT 06067

(24HR.) PHONE: (860) 571-5100

REVISION DATE: JANUARY 26, 1999 REVISION: 0031

LOCTITE CORPORATION

01/

30/00

ROCKY HILL, CONNECTICUT 06067

EMERGENCY PHONE: (860) 571-5100

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#### IMPLEMENT

INFORMATION FOR FIRST AID AND CASUALTY ON TREATMENT FOR ADHESION OF HUMAN SKIN TO ITSELF IF CAUSED BY CYANOACRYLATE ADHESIVES  
CYANOACRYLATE ADHESIVE IS A VERY FAST SETTING AND STRONG ADHESIVE. IT BONDS HUMAN TISSUE INCLUDING SKIN IN SECONDS. EXPERIENCE HAS SHOWN THAT ACCIDENTS DUE TO CYANOACRYLATES ARE HANDLED BEST BY PASSIVE, NONSURGICAL FIRST AID. TREATMENT OF SPECIFIC TYPES OF ACCIDENTS ARE GIVEN BELOW.

#### SKIN CONTACT

REMOVE EXCESS ADHESIVE. SOAK IN WARM, SOAPY WATER. THE ADHESIVE WILL COME LOOSE FROM THE SKIN IN SEVERAL HOURS. CURED ADHESIVE DOES NOT PRESENT A HEALTH HAZARD EVEN WHEN BONDED TO THE SKIN.  
AVOID CONTACT WITH CLOTHES, FABRICS, RAGS, OR TISSUE. CONTACT WITH THESE MATERIALS MAY CAUSE POLYMERIZATION. THE POLYMERIZATION OF LARGE AMOUNTS OF ADHESIVE WILL GENERATE HEAT CAUSING SMOKE, SKIN BURNS, AND STRONG, IRRITATING VAPORS. WEAR NITRILE OR POLYETHYLENE GLOVES AND APRON WHEN HANDLING LARGE AMOUNTS OF ADHESIVE.

#### SKIN ADHESION

FIRST IMMERSE THE BONDED SURFACES IN WARM, SOAPY WATER. PEEL OR ROLL THE SURFACES APART WITH THE AID OF A BLUNT EDGE, E.G. A SPATULA OR A TEASPOON HANDLE; THEN REMOVE ADHESIVE FROM THE SKIN WITH SOAP AND WATER. DO NOT TRY TO PULL SURFACES APART WITH A DIRECT OPPOSING ACTION.

#### EYELID TO EYELID OR EYEBALL ADHESION

IF THE EVENT THAT EYELIDS ARE STUCK TOGETHER OR BONDED TO THE EYEBALL, WASH THOROUGHLY WITH WARM WATER AND APPLY A GAUZE PATCH. THE EYE WILL OPEN WITHOUT FURTHER ACTION, TYPICALLY IN 1-4 DAYS. THERE WILL BE NO RESIDUAL DAMAGE. DO NOT TRY TO OPEN THE EYES BY MANIPULATION.  
ADHESIVE ON THE EYEBALL

CYANOACRYLATE INTRODUCED INTO THE EYES WILL ATTACH ITSELF TO THE EYE PROTEIN AND WILL DISASSOCIATE FROM IT OVER INTERMITTENT PERIODS, GENERALLY COVERING SEVERAL HOURS. THIS WILL CAUSE PERIODS OF WEEPING UNTIL CLEARANCE IS ACHIEVED. DURING THE PERIOD OF CONTAMINATION, DOUBLE VISION MAY BE EXPERIENCED TOGETHER WITH A LACHRYMATORY EFFECT, AND IT IS IMPORTANT TO UNDERSTAND THE CAUSE AND REALIZE THAT DISASSOCIATION WILL NORMALLY OCCUR WITHIN A MATTER OF HOURS, EVEN WITH GROSS CONTAMINATION.

#### MOUTH

IF LIPS ARE ACCIDENTALLY STUCK TOGETHER, APPLY LOTS OF WARM WATER TO THE LIPS AND ENCOURAGE MAXIMUM WETTING AND PRESSURE FROM SALIVA INSIDE THE MOUTH. PEEL OR ROLL LIPS APART. DO NOT TRY TO PULL THE LIPS

LOCTITE CORPORATION

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EMERGENCY PHONE: (860) 571-5100

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#### SUPPLEMENT

WITH DIRECT OPPOSING ACTION.

IT IS ALMOST IMPOSSIBLE TO SWALLOW CYANOACRYLATE. THE ADHESIVE SOLIDIFIES AND ADHERES IN THE MOUTH. SALIVA WILL LIFT THE ADHESIVE IN ONE HALF TO TWO DAYS. IN CASE A LUMP FORMS IN THE MOUTH, POSITION THE PATIENT TO PREVENT INGESTION OF THE LUMP WHEN IT DETACHES.

#### BURNS

CYANOACRYLATES GIVE OFF HEAT ON SOLIDIFICATION. IN RARE CASES A LARGE DROP WILL INCREASE IN TEMPERATURE ENOUGH TO CAUSE A BURN.

BURNS SHOULD BE TREATED NORMALLY AFTER THE LUMP OF CYANOACRYLATE IS REMOVED FROM THE TISSUE AS DESCRIBED ABOVE.

#### SURGERY

IT SHOULD NEVER BE NECESSARY TO USE SUCH A DRASTIC METHOD TO SEPARATE ACCIDENTALLY BONDED SKIN.

APPLICATION ASSISTANCE . BROWSE CATALOG . DISTRIBUTOR LOCATOR . DATASHEETS .

WHAT'S NEW

ABOUT LOCTITE . CONTACT LOCTITE . LITERATURE . LOCTITE WORLD WIDE . SEARCH .

HOME

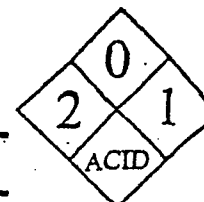
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# Material Safety Data Sheet

## OSPHO METAL TREATMENT

QUICK IDENTIFIER  
Common Name (used on label and list)

May be used to comply with OSHA's Hazard Communication Standard,  
29CFR 1910.1200. Standard must be consulted for specific requirements.



NFPA 704

### SECTION 1 -

Manufacturer's Name THE SKYBRYTE COMPANY

Address 3125 PERKINS AVENUE

Emergency Telephone No. 800-424-9300 (CHEMTREC)

City, State, and ZIP CLEVELAND, OHIO 44114

Other Information Calls 216-771-1590

Signature of Person Responsible for Preparation (Optional) S. L. PITCHER

Date Prepared JANUARY 15, 2003

### SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO
PHOSPHORIC ACID (75%)	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup> STEL	45.0%	7664-38-2

Section 313 Supplier Notification: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372) :

CHEMICAL NAME:	% BY WEIGHT	DOT Hazard: Class 8
PHOSPHORIC ACID (75%)	45.0%	UN# 1805

All ingredients of this product are listed in compliance with Section 15 of the Toxic Substance Control Act (T.S.C.A.)  
This information should be included in all MSDS sheets that are distributed.

### SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	240F	Specific Gravity (H <sub>2</sub> O=1)	1.22+/- .04	Vapor Pressure (mm Hg)	UNK
		Vapor Density (Air = 1)	N/A		
Solubility in Water	100%	pH < 2 (strong acid)	Reactivity in Water	NONE	
Appearance and Odor	GREEN LIQUID WITH TYPICAL ACIDIC ODOR	Melting Point	N/A		

### SECTION 4 - FIRE & EXPLOSION DATA

Flash Point	N/A	Method Used	NON-FLAMMABLE	Flammable Limits in Air % by Volume	LEL Lower	N/A	UEL Upper	N/A
Auto-Ignition Temperature	N/A	Extinguisher Media	N/A					
Special Fire Fighting Procedures	N/A							

Unusual Fire and Explosion Hazards MAY DECOMPOSE TO RELEASE OXYGEN AROUND 400C (750F). WILL PRODUCE

IRRITATING PHOSPHORIC OXIDE FUMES UNDER FIRE CONDITIONS.

**SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)**Stability   Unstable   ☐ Conditions  
                 Stable   ☒ No Avoid

AVOID CONTACT WITH STRONG ALKALIES

Incompatibility  
(Materials to Avoid)

REACTION WITH METALS WILL LIBERATE HYDROGEN GAS. (EXTREMELY FLAMMABLE!)

Hazardous  
Decomposition Products

PHOSPHORIC ACID FUMES. (STRONG IRRITANT)

Hazardous   May Occur   ☐ Conditions  
Polymerization   Will Not Occur   ☒ No Avoid

AVOID CONTACT WITH STRONG ALKALIES. (WILL PRODUCE

VIOLENT ACID/BASE NEUTRALIZATION REACTION)

**SECTION 6 - HEALTH HAZARDS**

1 Acute

STRONG IRRITANT - SLIGHTLY TOXIC

2 Chronic

SLIGHTLY TOXIC - CAUSES BURNS TO EXPOSED TISSUE

Signs and  
Symptoms of Exposure

LIQUID IS CORROSIVE TO EYES AND SKIN, MIST PRODUCES IRRITATION TO EYES, NOSE,

THROAT, AND LUNGS.

Medical Conditions Generally  
Aggravated by Exposure

EMPHYSEMA, ASTHMA OR OTHER CONDITIONS RESULTING IN DECREASED

RESPIRATORY FUNCTION.

Chemical Listed as Carcinogen  
or Potential CarcinogenNational Toxicology   Yes   ☐  
Program   No   ☒IARC   Yes   ☐  
Monographs   No   ☒OSHA   Yes   ☐  
No   ☒Emergency and  
First Aid Procedures

CALL A PHYSICIAN IMMEDIATELY,   INGESTION - GIVE LARGE QUANTITIES OF WATER.

" DO NOT INDUCE VOMITING "

SKIN AND EYES - FLUSH WITH WATER

**ROUTES  
OF  
ENTRY**

1 Inhalation

YES

2 Eyes

YES

3 Skin

YES

4 Ingestion

PRIMARY HAZARD

**SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES**Precautions to be Taken  
in Handling and Storage

USE GOGGLES AND/OR FACE SHIELDS, RUBBER APRONS, GLOVES AND BOOTS WHERE

SPLASHING OR LIQUID CONTACT MAY BE EXPECTED.

Other  
Precautions

AIRBORNE MIST - USE NIOSH/MSHA ACID GAS RESPIRATOR WITH FULL FACE PIECE.

KEEP STORED IN SUITABLE CONTAINER.

Steps to be Taken in Case  
Material is Released or Spilled

WEAR SUITABLE PROTECTIVE CLOTHING. EYE PROTECTION, AND RESPIRATOR.

NEUTRALIZE WITH SODA ASH AND FLUSH THE AREA WITH LARGE AMOUNTS OF WATER.

Waste Disposal

Methods (Consult federal, state, and local regulations)

NEUTRALIZE WITH SODA ASH OR LIME AND DISCHARGE INTO A

TREATMENT SYSTEM IN ACCORDANCE WITH LOCAL REGULATIONS.

**SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**Respiratory Protection  
(Specify Type)

NIOSH/MSHA ACID GAS WITH FULL FACE PIECE.

Ventilation

Local  
ExhaustADEQUATE TO  
MEET PELMechanical  
(General)

N/A

Special

N/A

Other

N/A

Protective  
Gloves

ACID RESISTANT

Eye  
Protection

CHEMICAL GOGGLES

Other Protective  
Clothing or Equipment

RUBBER APRON AND BOOTS AS NECESSARY.

Work/Hygiene Practices

STORE AND HANDLE AS STRONG ACID. WASH BEFORE EATING OR DRINKING.

**IMPORTANT**

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

## MATERIAL SAFETY DATA SHEET (MSDS)

This MSDS should be attached or kept with the respective product with which it is associated.

SAFETY DATA SHEET - A2897

Associated Grainger Items  
1D259, 1D259

## MATERIAL SAFETY DATA SHEET

## -----SECTION 1: PRODUCT &amp; COMPANY IDENTIFICATION -----

PRODUCT NAME: QUICK CLEAN(TM)

PRODUCT NUMBER(S): 03182, 03183, 03184

## MANUFACTURED BY:

CRC INDUSTRIES, INC.  
885 LOUIS DRIVE  
WARMINSTER, PA 18974  
(215) 674-4300

## 24-HOUR EMERGENCY INFORMATION:

CHEMTREC: (800) 424-9300

## -----SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS -----

COMPONENT	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER	%
TETRACHLOROETHYLENE	127-18-4	25 PPM	25 PPM	NE	100

## -----SECTION 3: HAZARDS IDENTIFICATION -----

## EMERGENCY OVERVIEW:

## APPEARANCE &amp; ODOR:

COLORLESS LIQUID, IRRITATING ODOR AT HIGH CONCENTRATIONS.

DANGER: VAPOR HARMFUL.

## POTENTIAL HEALTH EFFECTS:

## INHALATION:

HEADACHES, DIZZINESS, DRUNKENNESS, IRREGULAR HEARTBEATS, UNCONSCIOUSNESS,  
IRRITATION TO UPPER RESPIRATORY TRACT AND CENTRAL NERVOUS SYSTEM EFFECTS.

EYES: IRRITATION

SKIN: IRRITATION

ION: NA

## SPILL/LEAK PROCEDURES:

AREA SHOULD BE VENTILATED. ABSORBENT SHOULD BE USED TO PICK UP EXCESS  
MATERIAL. ALL USED AND UNUSED PRODUCT SHOULD BE DISPOSED OF IN ACCORDANCE

## CARCINOGENICITY:

OSHA: YES

IARC: YES

NTP: YES

CHRONIC OVEREXPOSURE: REPEATED OVEREXPOSURE HAVE CAUSED LIVER EFFECTS.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

SYMPTOMS DEPEND ON LEVEL AND DURATION OF EXPOSURE.

## -----SECTION 4: FIRST AID MEASURES -----

INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NECESSARY.

EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.

SKIN: REMOVE CONTAMINATED CLOTHING AND WASH AREA WITH SOAP AND WATER.

INGESTION: CALL A PHYSICIAN. DO NOT INDUCE VOMITING.

## -----SECTION 5: FIRE-FIGHTING MEASURES -----

FLASHPOINT: NONE

METHOD: TCC, TOC, COC

LEL: ND

UEL: ND

EXTINGUISHING MEDIA: WATER FOG

HAZARDOUS COMBUSTION PRODUCTS: HYDROGEN CHLORIDE, SOME PHOSGENE.

## FIRE-FIGHTING INSTRUCTIONS:

REMOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. USE SELF-CONTAINED BREATHING  
APPARATUS FOR FIRE FIGHTING.

## NFPA:

HEALTH 2

FLAMMABILITY 0

REACTIVITY 0

## HMIS:

HEALTH 2

FLAMMABILITY 0

REACTIVITY 0

PPE B

## -----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

## -----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE

WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION 7: HANDLING AND STORAGE -----

HANDLING PROCEDURES: STORE IN A COOL, DRY AREA.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

ADEQUATE TO PREVENT ACCUMULATION OF VAPORS. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN LEVELS BELOW THE EXPOSURE LIMITS. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

RESPIRATORY:

USE NIOSH/MSHA COMPLIANT RESPIRATORS OR SELF-CONTAINED BREATHING APPARATUS ABOVE EXPOSURE LIMITS. FOLLOW OSHA REGULATIONS 29 CFR 1910.134.

PROTECTIVE CLOTHING/EQUIPMENT:

WEAR CHEMICALLY PROTECTIVE GLOVES AND SAFETY GLASSES. USE A SPLASH APRON AND BOOTS IF SPLASHING OCCURS.

-----SECTION 9: PHYSICAL & CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

APPEARANCE & ODOR: COLORLESS LIQUID, SOLVENT ODOR

SPECIFIC GRAVITY: 1.619

BOILING POINT: 250 DEG. F (ESTIMATED)

FREEZING POINT: ND

VAPOR PRESSURE: 13 mmHg

EVAPORATION RATE: RAPID

VAPOR DENSITY (AIR = 1): >AIR

pH: NA

SOLUBILITY: SLIGHT IN WATER

VOLATILE ORGANIC COMPOUNDS:

%: 0

G/L: 0

LBS./GAL: 0

PLACARD: NA

SPECIAL PROVISIONS: NA

PART NUMBER: 03184

SHIPPING NAME: TETRACHLOROETHYLENE

HAZARD CLASS: 6.1

UN NUMBER: 1710

PACKING GROUP: III

HAZARDOUS POLYMERIZATION: NO

CHEMICAL INCOMPATIBILITIES: STRONG OXIDIZERS

MATERIALS TO AVOID:

AVOID STORAGE IN ALUMINUM CONTAINERS OR CONTACT WITH ALUMINUM AND/OR ZINC POWDERS.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT.

SEE SECTION 3 OF THIS MSDS FOR ACUTE SYMPTOMS OF OVEREXPOSURE AND CARCINOGENICITY INFORMATION.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICITY: NO DATA AVAILABLE.

ENVIRONMENTAL FATE: NO DATA AVAILABLE FOR BIODEGRADATION.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

DISPOSAL:

THIS MATERIAL IF DISCARDED MAY BE HAZARDOUS WASTE UNDER U.S. EPA RCRA REGULATIONS. ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT YOUR LOCAL OR STATE ENVIRONMENTAL AGENCY FOR SPECIFIC RULES. DO NOT DUMP INTO SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.

-----SECTION 14: TRANSPORTATION INFORMATION -----

PART NUMBER: 03182

SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

UN NUMBER: NA

PACKING GROUP: NA

LABEL: NA

PLACARD: NA

SPECIAL PROVISIONS: NA

PART NUMBER: 03183

SHIPPING NAME: TETRACHLOROETHYLENE

HAZARD CLASS: 6.1

UN NUMBER: 1897

PACKING GROUP: III

LABEL: NA

-----SECTION 16: ADDITIONAL INFORMATION -----

PREPARED BY: ADAM M. SELISKER

DATE: MARCH 21, 2002

TECHNICAL INFORMATION: (800) 521-3168

LABEL: NA  
PLACARD: NA  
SPECIAL PROVISIONS: RQ

-----SECTION 15: REGULATORY INFORMATION -----

TSCA: ALL COMPONENTS ARE EITHER LISTED UNDER TSCA OR ARE EXEMPT.

SARA TITLE III:

SECTION 311/312: CHRONIC

SECTION 313\*: TETRACHLOROETHYLENE

CERCLA/SUPERFUND (RQ): 100 LBS.

EXTREMELY HAZARDOUS SUBSTANCES: NO

CALIFORNIA PROP 65:

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE  
CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

\*SEE SECTION 2 FOR PERCENTAGE

CRC#: 491G

THIS INFORMATION IS ACCURATE TO THE BEST OF CRC INDUSTRIES' KNOWLEDGE OR  
OBTAINED FROM SOURCES BELIEVED BY CRC TO BE ACCURATE. BEFORE USING ANY  
PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

CAS: CHEMICAL ABSTRACT SERVICE

PPM: PARTS PER MILLION

TCC: TAG CLOSED CUP

LEL: LOWER EXPLOSIVE LIMIT

UEL: UPPER EXPLOSIVE LIMIT

PPE: PERSONAL PROTECTION EQUIPMENT

TOC: TAG OPEN CUP

NA: NOT APPLICABLE

ND: NOT DETERMINED

NE: NOT ESTABLISHED

G/L: GRAMS PER LITER

LBS./GAL: POUNDS PER GALLON

RQ: REPORTABLE QUANTITY

COC: CLEVELAND OPEN CUP

## MATERIAL SAFETY DATA SHEET (MSDS)

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*  
 MATERIAL SAFETY DATA SHEET - A3210

Associated Grainger Items

4KM56

07/23/00

LOCTITE CORPORATION

ROCKY HILL, CONNECTICUT 06067

EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET

THREAD SEALANT WITH TEFLON

30561

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

ITEM NO.: 30561

PRODUCT TYPE: SEALANT

IS A REGISTERED TRADEMARK OF E.I. DUPONT DE NEMOURS COMPANY INC

-----2. COMPOSITION, INFORMATION ON INGREDIENTS -----

INGREDIENTS	CAS NO.	%
ISOPROPYL ALCOHOL	67-63-0	35-40
TALC	14807-96-6	25-30
VEGETABLE OIL	8001-79-4	20-25
VINYL RESIN	63148-65-2	10-15
POLY (TETRAFLUOROETHYLENE)	9002-84-0	1-3
TITANIUM DIOXIDE	13463-67-7	1-3

INGREDIENTS WHICH HAVE EXPOSURE LIMITS:

EXPOSURE LIMITS (TWA):

INGREDIENTS	ACGIH (TLV)	OSHA (PEL)	OTHER
ISOPROPYL ALCOHOL	400 PPM TWA	400 PPM TWA	400 PPM TWA

CNS: CENTRAL NERVOUS SYSTEM

IRR: IRRITANT

KID: KIDNEY

LUN: LUNG

983 MG/M3 980 MG/M3 DUPONT AEL

TALC 2 MG/M3 TWA 2 MG/M3 TWA NONE  
 RESPIRABLE DUST RESPIRABLE DUST

POLY (TETRAFLUOROETHYLENE) NONE NONE AEL (DUPONT)  
 5MG/M3 8HR

DUST

TITANIUM DIOXIDE 10 MG/M3 15 MG/M3 NONE  
 TOTAL DUST

EXPOSURE LIMITS (STEL):

INGREDIENTS ACGIH (TLV) OSHA (PEL)

ISOPROPYL ALCOHOL 500 PPM 500 PPM  
 1230 MG/M3 1225 MG/M3

-----3. HAZARDS IDENTIFICATION -----

TOXICITY: EYE IRRITANT. MODERATELY TOXIC BY INGESTION.

PRIMARY ROUTES OF ENTRY: INHALATION, INGESTION, CONTACT.

SIGNS AND SYMPTOMS OF EXPOSURE:

VAPORS CAUSE IRRITATION OF EYES, NOSE AND THROAT ABOVE TLV.

HEADACHE, NAUSEA, DIZZINESS MAY OCCUR.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE:

SKIN, EYE, AND RESPIRATORY DISORDERS.

INGREDIENTS	LITERATURE REFERENCED	CARCINOGEN		
		TARGET ORGAN AND OTHER	NTP	IARC OSHA
HEALTH EFFECTS				
ISOPROPYL ALCOHOL	ALG BLO CNS IRR KID	NO	N/A	NO
TALC	IRR LUN SOM	NO	N/A	NO
VEGETABLE OIL	IRR	NO	NO	NO
VINYL RESIN	IRR	NO	NO	NO
POLY (TETRAFLUOROETHYLENE)	NTG	NO	N/A	NO
TITANIUM DIOXIDE	IRR RES	NO	NO	NO

ABBREVIATIONS:

N/A: NOT APPLICABLE

ALG: ALLERGEN

BLO: BLOOD

HANDLING:

AVOID EYE CONTACT. AVOID PROLONGED SKIN CONTACT OR PROLONGED BREATHING OF

FUMES.

WTO: NO TARGET ORGANS

RES: RESPIRATORY

SOM: EVIDENCE OF SOME CARCINOGENICITY

-----4. FIRST AID MEASURES -----

INGESTION:

DO NOT INDUCE VOMITING. KEEP INDIVIDUAL CALM. OBTAIN MEDICAL ATTENTION.

INHALATION:

REMOVE TO FRESH AIR. IF SYMPTOMS PERSIST, OBTAIN MEDICAL ATTENTION.

SKIN CONTACT: WASH WITH SOAP AND WATER.

EYE CONTACT: FLUSH AT LEAST 15 MINUTES WITH WATER. OBTAIN MEDICAL ATTENTION.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: 74 DEG. F

METHOD: TAG CLOSED CUP

RECOMMENDED EXTINGUISHING AGENTS: CARBON DIOXIDE, FOAM, DRY CHEMICAL

SPECIAL FIREFIGHTING PROCEDURES: NOT AVAILABLE

HAZARDOUS PRODUCTS FORMED BY FIRE OR THERMAL DECOMP: TOXIC FLUORIDES

AL FIRE OR EXPLOSION HAZARDS: NONE

EXPLOSIVE LIMITS:

(% BY VOLUME IN AIR) LOWER: 2.3%

(% BY VOLUME IN AIR) UPPER: 12.7%

-----6. ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

REMOVE IGNITION SOURCES. MAINTAIN ADEQUATE VENTILATION. SOAK UP WITH AN INERT

ABSORBENT. STORE IN A CLOSED CONTAINER UNTIL DISPOSAL. CLEAN UP WITH ISOPROPYL

ALCOHOL.

-----7. HANDLING AND STORAGE -----

SAFE STORAGE: STORE AWAY FROM HEAT, SPARKS OR FLAME.

(CONTACT LOCTITE CUSTOMER SERVICE 1-800-243-4874 FOR SHELF LIFE INFORMATION)

SEE SECTION 3.

-----12. ECOLOGICAL INFORMATION -----

NO DATA AVAILABLE

-----8. EXPOSURE CONTROLS, PERSONAL PROTECTION -----

EYES: SAFETY GLASSES OR GOGGLES.

SKIN: RUBBER OR PLASTIC GLOVES.

VENTILATION: MUST BE ADEQUATE TO AVOID EXCEEDING TLV.

RESPIRATORY: NOT AVAILABLE

SEE SECTION 2 FOR EXPOSURE LIMITS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE: WHITE PASTE

ODOR: ALCOHOLIC

BOILING POINT: 180 DEG. F

pH: DOES NOT APPLY

SOLUBILITY IN WATER: PARTIAL

SPECIFIC GRAVITY: 1.12 AT 77 DEG. F

VOLATILE ORGANIC COMPOUND (EPA METHOD 24): 37.9%

VAPOR PRESSURE: 33 MM AT 68 DEG. F

VAPOR DENSITY: 2.07

EVAPORATION RATE (ETHER = 1): 7.7

-----10. STABILITY AND REACTIVITY -----

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBILITY: STRONG OXIDIZING AGENTS.

CONDITIONS TO AVOID: NOT AVAILABLE

HAZARDOUS DECOMPOSITION PRODUCTS (NON-THERMAL): NONE

-----11. TOXICOLOGICAL INFORMATION -----

CLASS 3, PACKING GROUP III (MORE THAN 500 ML)

UN OR ID NUMBER:

ID 8000 (NOT MORE THAN 500 ML)

UN 1866 (MORE THAN 500 ML)

-----15. REGULATORY INFORMATION -----

-----13. DISPOSAL CONSIDERATIONS -----

RECOMMENDED METHODS OF DISPOSAL:

OPERATE FOLLOWING EPA AND LOCAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER:

D001 - HAZARDOUS WASTE PER 40CFR 261.21

-----14. TRANSPORTATION INFORMATION -----

DOT (49 CFR 172):

DOMESTIC GROUND TRANSPORT:

PROPER SHIPPING NAME:

CONSUMER COMMODITY (NOT MORE THAN FIVE LITERS)

RESIN SOLUTION (MORE THAN FIVE LITERS)

HAZARD CLASS OR DIVISION:

ORM-D (NOT MORE THAN FIVE LITERS)

CLASS 3, PACKING GROUP III (MORE THAN FIVE LITERS)

IDENTIFICATION NUMBER:

NONE (NOT MORE THAN FIVE LITERS)

UN 1866 (MORE THAN FIVE LITERS)

MARINE POLLUTANT: NONE

PROPER SHIPPING NAME:

CONSUMER COMMODITY (NOT MORE THAN 500 ML)

RESIN SOLUTION (MORE THAN 500 ML)

CLASS OR DIVISION:

CLASS 9 (NOT MORE THAN 500 ML)

CA PROPOSITION 65: NO PROP65 CHEMICALS ARE KNOWN TO BE PRESENT.

-----16. OTHER INFORMATION -----

ESTIMATED NFPA(R) CODE:

HEALTH HAZARD 2

FIRE HAZARD 3

REACTIVITY HAZARD 0

SPECIFIC HAZARD DOES NOT APPLY

ESTIMATED HMIS(R) CODE:

HEALTH HAZARD 2

FLAMMABILITY HAZARD 3

REACTIVITY HAZARDS 0

PERSONAL PROTECTION SEE SECTION 8.

NFPA IS A REGISTERED TRADEMARK OF THE NATIONAL FIRE PROTECTION ASSN.

HMIS IS A REGISTERED TRADEMARK OF THE NATIONAL PAINT AND COATINGS ASSN.

PREPARED BY: STEPHEN REPETTO

TITLE: RESEARCH CHEMIST - SAFETY, HEALTH & REGULATORY AFFAIRS

COMPANY:

LOCTITE CORP.

1001 TR BR CR

ROCKY HILL, CT 06067

(24HR.) PHONE: (860) 571-5100

REVISION DATE: JANUARY 27, 1999

REVISION: 0030

## MSDS: B0081

LAB SAFETY DATA SHEET - B0081

Associated Grainger Item: 3DV27 - Sandpaper 240 Grit

[illegible]

## SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: ALUMINUM OXIDE COATED ABRASIVE

TRADE NAME:

ADALOX OR ABRASIVE CAP CODES:

H1XX, A1XX, A2XX, E2XX, F2XX, G2XX, H2XX, K2XX, Q1XX, Q2XX, R2XX, S2XX, T2XX, U2XX, W2

MANUFACTURER (4):  
SAINT-GOBAIN ABRASIVES, INC.  
ONE NEW BOND STREET  
WORCESTER, MA 01615-0008

(508) 795-5000

REVISION DATE: 1/03/2007

MSDS PRINT FORMAT: NUSA

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
ALUMINUM OXIDE, NON-FIBROUS	15.000 - 25.000	1344-28-1
CLOTH OR PAPER BACKING	45.000 - 55.000	N/A
BINDER SYSTEM **	10.000 - 30.000	N/A
CALCIUM CARBONATE	10.000 - 20.000	1317-65-3

\*\* SUBSTANCE IS A COMPOUND AND/OR MIXTURE:

OTHER: NOT APPLICABLE

### SECTION 3. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS:

DUST MAY BE SLIGHTLY IRRITATING TO EYES AND RESPIRATORY TRACT AT HIGH CONCENTRATIONS.

INHALATION CHRONIC EXPOSURE EFFECTS:

CHRONIC: MAY AFFECT BREATHING CAPACITY.

FOR PRODUCTS CONTAINING PHENOL/FORMALDEHYDE RESIN, DUST GENERATED FROM INTENDED USE MAY CONTAIN TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE WHICH UNDER EXCESSIVE EXPOSURE MAY CAUSE SKIN SENSITIZATION AND AIRWAY OBSTRUCTION.

FOR PRODUCTS CONTAINING INORGANIC FLUORIDES:  
EXCESSIVE EXPOSURE TO INORGANIC FLUORIDES HAVE BEEN SHOWN TO INCREASE  
BONE DENSITY.

EYE CONTACT ACUTE EXPOSURE EFFECTS: DUST MAY IRRITATE EYES

SKIN CONTACT ACUTE EXPOSURE EFFECTS:  
SOME MAY EXPERIENCE SKIN IRRITATION FROM DUST.

INGESTION ACUTE EXPOSURE EFFECTS:

NO KNOWN ADVERSE EFFECTS. BUT INGESTION NOT RECOMMENDED.

#### SECTION 4. FIRST AID MEASURES

**INHALATION:**

REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION.  
GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

WASH AFFECTED AREAS WITH SOAP AND WATER. OBTAIN MEDICAL ASSISTANCE.

**EYE CONTACT:**

WASH WITH LARGE AMOUNTS OF WATER. OBTAIN FIRST AID AND MEDICAL ASSISTANCE, IF NEEDED.

INGESTION:

CALL POISON CONTROL CENTER, HOSPITAL EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY.

## - SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING PROCEDURES: NOT APPLICABLE

HAZARDOUS PRODUCTS/COMBUSTION: NONE.

HAZARD RATING SOURCE NEPA:

```
HAZARD RATING
HEALTH      1
FLAMMABILITY 0
REACTIVITY  0
OTHER
```

## SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP: FOLLOW NORMAL CLEAN UP PROCEDURES.

## SECTION 7. HANDLING AND STORAGE

HANDLING: HANDLE WITH ADEQUATE VENTILATION FOR NUISANCE DUST.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION PROTECTION:  
RECOMMEND USING LOCAL EXHAUST VENTILATION WHEN GENERAL VENTILATION IS NOT  
KEEPING THE AIRBORNE CONCENTRATION BELOW THE TLV.

RESPIRATORY PROTECTION:  
RESPIRATORS ARE REQUIRED WHEN AIRBORNE CONTAMINANT LEVELS EXCEED THE  
TLV(S).

PROTECTION:  
S WEAR SAFETY GLASSES OR SOME TYPE OF EYE PROTECTION WHILE SANDING.

PROTECTION:  
USE OF THIS PRODUCT MAY CREATE ELEVATED SOUND LEVELS. HEARING PROTECTION  
SHOULD BE WORN WHERE REQUIRED (SEE OSHA 29 CFR 1910.134 AND OTHER  
APPLICABLE REGULATIONS).

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR: SOLID ARTICLE. ODORLESS.

#### SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES: AVOID ACIDS OF ALL TYPES WITH A pH < 4.0.

DECOMPOSITION:

IN USE, DUST AND DECOMPOSING ODORS MAY BE GENERATED. IN MOST CASES, THE  
MATERIAL REMOVED FROM THE WORKPLACE WILL BE SIGNIFICANTLY GREATER THAN THE  
SANDPAPER COMPONENTS. COOLANTS MAY PRODUCE OTHER DECOMPOSITION PRODUCTS.

FOR PRODUCTS CONTAINING PHENOL AND FORMALDEHYDE RESIN, THERMAL  
DECOMPOSITION MAY PRODUCE TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE.

FOR PRODUCTS CONTAINING INORGANIC FLUORIDES, THERMAL COMPOSITION MAY  
PRODUCE TRACE AMOUNTS OF FLUORIDES.

#### SECTION 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: NOT APPLICABLE

LD50/LC50: VALUES ARE NOT APPROPRIATE OR AVAILABLE.

#### SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE: NOT APPLICABLE

#### SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:  
USE STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE,  
PROVINCIAL AND LOCAL LAWS.

#### SECTION 14. TRANSPORT INFORMATION

RD CLASS:

PRODUCT IS NOT HAZARDOUS AS DEFINED BY THE DEPARTMENT OF  
TRANSPORTATION. (USA)

THIS PRODUCT IS "NOT REGULATED" UNDER THE TRANSPORTATION OF DANGEROUS GOODS  
ACT. (CAN)

#### SECTION 15. REGULATORY INFORMATION

EXPOSURE LIMITS/REGULATORY INFORMATION:

SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MOL	
ALUMINUM OXIDE, NON-FIEROUS	MG/M3	15.0000	10.0000	10.0000	
CLOTH OR PAPER BACKING	PPM	0.0000	0.0000	0.0000	
BINDER SYSTEM	PPM	0.0000	0.0000	0.0000	
CALCIUM CARBONATE	MG/M3	15.0000	10.0000	0.0000	

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS:

CA PROP 65: NOT APPLICABLE

TSCA:

SECTION 8(B) - INVENTORY STATUS:

ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE  
TOXIC SUBSTANCE CONTROL ACT.

DOMESTIC SUBSTANCE LIST:

ALL COMPONENTS OF THIS PRODUCT ARE FOUND ON THE DOMESTIC SUBSTANCE LIST.

#### SECTION 16. OTHER INFORMATION

DISCLAIMER:  
THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE TAKEN FROM SOURCES  
BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF; HOWEVER, THE COMPANY MAKES  
NO WARRANTY WITH RESPECT TO THE ACCURACY OF THE INFORMATION OR THE  
SUITABILITY OF THE RECOMMENDATIONS, AND ASSUMES NO LIABILITY TO ANY  
USER THEREOF.

ABBREVIATIONS:

EQUAL

LESS THAN

GT = GREATER THAN

AP = APPROXIMATELY

TR = TRACE

ND = NO DATA AVAILABLE



## SECTION 7. HANDLING AND STORAGE

HANDLING: HANDLE WITH ADEQUATE VENTILATION FOR NUISANCE DUST.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### VENTILATION PROTECTION:

RECOMMEND USING LOCAL EXHAUST VENTILATION WHEN GENERAL VENTILATION IS NOT SUFFICIENT TO KEEP THE AIRBORNE CONCENTRATION BELOW THE TLV.

### RESPIRATORY PROTECTION:

RESPIRATORS ARE REQUIRED WHEN AIRBORNE CONTAMINANT LEVELS EXCEED THE TLV(S).

### EYE PROTECTION:

ALWAYS WEAR SAFETY GLASSES OR SOME TYPE OF EYE PROTECTION WHILE SANDING.

### OTHER PROTECTION:

USE OF THIS PRODUCT MAY CREATE ELEVATED SOUND LEVELS. HEARING PROTECTION SHOULD BE WORN WHERE REQUIRED (SEE OSHA 29 CFR 1910.134 AND OTHER APPLICABLE REGULATIONS).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR: SOLID ARTICLE. ODORLESS.

## SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES: AVOID ACIDS OF ALL TYPES WITH A pH < 4.0.

### DECOMPOSITION:

IN USE, DUST AND DECOMPOSING ODORS MAY BE GENERATED. IN MOST CASES, THE MATERIAL REMOVED FROM THE WORKPLACE WILL BE SIGNIFICANTLY GREATER THAN THE SANDPAPER COMPONENTS. COOLANTS MAY PRODUCE OTHER DECOMPOSITION PRODUCTS. FOR PRODUCTS CONTAINING PHENOL AND FORMALDEHYDE RESIN, THERMAL DECOMPOSITION MAY PRODUCE TRACE AMOUNTS OF PHENOL AND FORMALDEHYDE. FOR PRODUCTS CONTAINING INORGANIC FLUORIDES, THERMAL COMPOSITION MAY PRODUCE TRACE AMOUNTS OF FLUORIDES.

## SECTION 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: NOT APPLICABLE

LD50/LC50: VALUES ARE NOT APPROPRIATE OR AVAILABLE.

## SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE: NOT APPLICABLE

## SECTION 13. DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL:

USE STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS.

## SECTION 14. TRANSPORT INFORMATION

### HAZARD CLASS:

PRODUCT IS NOT HAZARDOUS AS DEFINED BY THE DEPARTMENT OF TRANSPORTATION. (USA)

PRODUCT IS "NOT REGULATED" UNDER THE TRANSPORTATION OF DANGEROUS GOODS ACT. (CAN)

## SECTION 15. REGULATORY INFORMATION

### EXPOSURE LIMITS/REGULATORY INFORMATION:

SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MOL
ALUMINUM OXIDE, NON-FIBROUS	MG/M3	15.0000	10.0000	10.0000
CLOTH OR PAPER BACKING	PPM	0.0000	0.0000	0.0000
BINDER SYSTEM	PPM	0.0000	0.0000	0.0000

### LEGEND:

EXPOSURE LIMIT DESCRIPTIONS:

CA PROP 65: NOT APPLICABLE

### TSCA:

SECTION 8(B) - INVENTORY STATUS:

ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE TOXIC SUBSTANCE CONTROL ACT.

### DOMESTIC SUBSTANCE LIST:

ALL COMPONENTS OF THIS PRODUCT ARE FOUND ON THE DOMESTIC SUBSTANCE LIST.

## SECTION 16. OTHER INFORMATION

### DISCLAIMER:

THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE TAKEN FROM SOURCES BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF; HOWEVER, THE COMPANY MAKES NO WARRANTY WITH RESPECT TO THE ACCURACY OF THE INFORMATION OR THE SUITABILITY OF THE RECOMMENDATIONS, AND ASSUMES NO LIABILITY TO ANY USER THEREOF.

### KEY TO ABBREVIATIONS:

EQ=EQUAL

LT=LESS THAN

GT=GREATER THAN

APPROXIMATELY

TRACE

DATA AVAILABLE

## MATERIAL SAFETY DATA SHEET (MSDS)

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A5160

## Associated Grainger Items

4UG98

GE

GE SILICONES

FORMAT: USA

MATERIAL SAFETY DATA SHEET

PRODUCT: GE012A SILICONE RUBBER COMPOUND

## -----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

## MANUFACTURED BY:

GE SILICONES

260 HUDSON RIVER ROAD

WATERFORD, NY 12188

EMERGENCY PHONE (24 HRS): (518) 237-3330

## SUPPLIED BY:

GE SILICONES

260 HUDSON RIVER ROAD

WATERFORD, NY 12188

EMERGENCY PHONE (24 HRS): (518) 237-3330

REVISED: 02/25/03

PREPARER: B. JAVOREK

CHEMICAL FAMILY/USE: SILICONE RUBBER SEALANT

FORMULA: MIXTURE

## -----2. COMPOSITION/INFORMATION ON INGREDIENTS -----

PRODUCT COMPOSITION/ CAS REG NO.	APPROX. WGT. %	ACGIH TLV TWA	OSHA PEL STEL	ACGIH TLV TWA	OSHA PEL STEL	UNITS
-------------------------------------	-------------------	------------------	------------------	------------------	------------------	-------

## 1. HAZARDOUS

TREATED PUMED SILICA	5-10	10	NE	15	NE	MG/M3
68611-44-9						

DISTILLATES, PETROLEUM	5-10	NE	NA	NE	NA	NA
------------------------	------	----	----	----	----	----

TREATED LIGHT

AS A CARCINOGEN OR SUSPECTED CARCINOGEN BY NTP, IARC, OR OSHA.

PRODUCTS/INGREDIENTS: THIS SPACE RESERVED FOR SPECIAL USE.

64742-47-8

METHYLTRIACETOXSILANE	1-5	10 (R)	NE	10 (R)	NE	PPM
4253-34-3						

## 2. NON-HAZARDOUS

POLYDIMETHYLSILOXANE	60-80	NE	NE			
SILANOL/STPD						
70131-67-8						

SEE SECTION 15 FOR DESCRIPTION OF ANY WHMIS TRADE SECRET(S).

## -----3. HAZARDS IDENTIFICATION -----

## EMERGENCY OVERVIEW:

## WARNING:

MAY BE HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

IRRITATING TO SKIN, EYES, AND RESPIRATORY TRACT.

MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

AMMONIA ODOR

TRANSLUCENT SOLID

## POTENTIAL HEALTH EFFECTS:

## INGESTION:

MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.

MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA.

## SKIN CONTACT:

UNCURED PRODUCT CONTACT WILL IRRITATE LIPS, GUMS AND TONGUE.

UNCURED PRODUCT CONTACT MAY IRRITATE THE SKIN.

MAY BE ABSORBED THROUGH SKIN AND PRODUCE EFFECTS AS LISTED UNDER

"INGESTION".

## INHALATION:

CAUSES MILD RESPIRATORY IRRITATION.

APPLIES ONLY IN UNCURED STATE.

MAY ALSO CAUSE OTHER EFFECTS AS LISTED UNDER "INGESTION".

EYE CONTACT: UNCURED PRODUCT CONTACT IRRITATES EYES.

MEDICAL CONDITIONS AGGRAVATED: PRE-EXISTING SKIN OR RESPIRATORY DISEASES.

## SUBCHRONIC (TARGET ORGAN) EFFECTS:

CENTRAL NERVOUS SYSTEM

SKIN

## CHRONIC EFFECTS/CARCINOGENICITY:

THIS PRODUCT OR ONE OF ITS INGREDIENTS PRESENT 0.1% OR MORE IS NOT LISTED

EXTINGUISHING MEDIA: ALL STANDARD FIREFIGHTING MEDIA

SPECIAL FIREFIGHTING PROCEDURES:

PRINCIPLE ROUTES OF EXPOSURE:

ORAL.

DERMAL - SKIN.

INHALATION.

OTHER:

THIS PRODUCT CONTAINS METHYLPOLYSILOXANES WHICH CAN GENERATE FORMALDEHYDE AT APPROXIMATELY 300 DEGREES FAHRENHEIT (150 DEG. C) AND ABOVE, IN ATMOSPHERES WHICH CONTAIN OXYGEN. FORMALDEHYDE IS A SKIN AND RESPIRATORY SENSITIZER, EYE AND THROAT IRRITANT, ACUTE TOXICANT, AND POTENTIAL CANCER HAZARD. AN MSDS FOR FORMALDEHYDE IS AVAILABLE FROM GE SILICONES.

-----4. FIRST AID MEASURES -----

INGESTION:

DO NOT INDUCE VOMITING. IF VICTIM IS CONSCIOUS, GIVE 1-3 GLASSES OF WATER TO DRINK. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN:

TO CLEAN FROM SKIN, REMOVE COMPLETELY WITH A DRY CLOTH OR PAPER TOWEL, BEFORE WASHING WITH DETERGENT AND WATER.  
GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INHALATION:

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION USING A BARRIER DEVICE. IF BREATHING IS DIFFICULT GIVE OXYGEN.  
GET MEDICAL ATTENTION.

EYES:

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

NOTE TO PHYSICIAN: NONE KNOWN.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: NA (C) NA (F)

METHOD: NA

IGNITION TEMP: UNK (C) UNK (F)

FLAMMABLE LIMITS IN AIR - LOWER (%): UNK

FLAMMABLE LIMITS IN AIR - UPPER (%): UNK

SENSITIVITY TO MECHANICAL IMPACT (1/N): NO

SENSITIVITY TO STATIC DISCHARGE:

SENSITIVITY TO STATIC DISCHARGE IS NOT EXPECTED.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PRODUCT INFORMATION:

BOILING POINT: NA (C) NA (F)

VAPOR PRESSURE (20 C) (MM HG): NA

FIREFIGHTERS MUST WEAR NIOSH/MSHA APPROVED POSITIVE PRESSURE

SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK AND FULL PROTECTIVE CLOTHING.

-----6. ACCIDENTAL RELEASE MEASURES -----

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

WIPE, SCRAPE OR SOAK UP IN AN INERT MATERIAL AND PUT IN A CONTAINER FOR DISPOSAL.

WASH WALKING SURFACES WITH DETERGENT AND WATER TO REDUCE SLIPPING HAZARD.  
WEAR PROPER PROTECTIVE EQUIPMENT AS SPECIFIED IN THE PROTECTIVE EQUIPMENT SECTION.

-----7. HANDLING AND STORAGE -----

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN AND EYES.

REMOVE CONTACT LENSES BEFORE USING SEALANT. DO NOT HANDLE LENSES UNTIL ALL SEALANT HAS BEEN CLEANED FROM THE FINGER-TIPS, NAILS AND CUTICLES.

RESIDUAL SEALANT MAY REMAIN ON FINGERS FOR SEVERAL DAYS AND TRANSFER TO LENSES AND CAUSE SEVERE EYE IRRITATION.

PRODUCT RELEASES METHANOL DURING APPLICATION AND CURING.

PRODUCT RELEASES AMMONIA DURING APPLICATION AND CURING.

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

SHOWERS AND EYEWASH STATIONS. SEE "VENTILATION" BELOW.

RESPIRATORY PROTECTION:

IF EXPOSURE LIMITS ARE EXCEEDED OR RESPIRATORY IRRITATION IS EXPERIENCED,

NIOSH/MSHA APPROVED RESPIRATORY PROTECTION SHOULD BE WORN. SUPPLIED AIR

RESPIRATORS MAY BE REQUIRED FOR NON-ROUTINE OR EMERGENCY SITUATIONS.

RESPIRATORY PROTECTION MUST BE PROVIDED IN ACCORDANCE WITH OSHA

REGULATIONS (SEE 29 CFR 1910.134).

PROTECTIVE GLOVES: CLOTH GLOVES.

EYE AND FACE PROTECTION: SAFETY GLASSES.

OTHER PROTECTIVE EQUIPMENT: WEAR EYE PROTECTION AND PROTECTIVE CLOTHING.

VENTILATION:

VENTILATION AND OTHER FORMS OF ENGINEERING CONTROLS ARE PREFERRED FOR

CONTROLLING EXPOSURES. RESPIRATORY PROTECTION MAY BE NEEDED FOR

NON-ROUTINE OR EMERGENCY SITUATIONS.

-----11. TOXICOLOGICAL INFORMATION -----

PRODUCT INFORMATION:

ACUTE ORAL LD50 (MG/KG): NA

VAPOR DENSITY (AIR=1): NA

FREEZING POINT: NA (C) NA (F)

MELTING POINT: NA (C) NA (F)

PHYSICAL STATE: SOLID

ODOR: ACETIC ACID

COLOR: TRANSLUCENT

ODOR THRESHOLD (PPM): UNK

% VOLATILE BY VOLUME: NA

EVAP. RATE (BUTYL ACETATE=1): <1

SPECIFIC GRAVITY (WATER=1): 1.04

DENSITY (KG/M3): 1040

ACID/ALKALINITY (MEQ/G): NA

PH: NA

VOC EXCL. H2O & EXEMPTS (G/L): 36

SOLUBILITY IN WATER (20 C): INSOLUBLE

SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): TOLUENE

-----10. STABILITY AND REACTIVITY -----

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:

CARBON MONOXIDE.

CARBON DIOXIDE.

SILICON DIOXIDE.

ACETIC ACID.

INCOMPATIBILITY (MATERIALS TO AVOID): NONE KNOWN.

CONDITIONS TO AVOID: NONE KNOWN.

SARA SECTION 302: NONE FOUND

SARA (311,312) HAZARD CLASS: ACUTE HEALTH HAZARD

SARA (313) CHEMICALS: NONE

CLASSIFICATION: NA

WHMIS HAZARD CLASS:

D2B: TOXIC MATERIALS

ACUTE DERMAL LD50 (MG/KG): NA

ACUTE INHALATION LC50 (MG/L): NA

OTHER: NONE.

AMES TEST: UNKNOWN

-----12. ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NO DATA AT THIS TIME

CHEMICAL FATE INFORMATION: NO DATA AT THIS TIME

-----13. DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:

DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

-----14. TRANSPORT INFORMATION -----

DOT SHIPPING NAME: NONE

DOT HAZARD CLASS: NOT DOT REGULATED

DOT LABEL(S): NONE

UN/NA NUMBER: NONE

PLACARDS: NONE

IATA: NOT REGULATED BY IATA

IMO IMDG-CODE: NOT REGULATED FOR OCEAN TRANSPORTATION

EMS NO: NA

EUROPEAN CLASS:

RID (OCTI): NONE

ADR (RCE): NONE

RAR (IATA): NONE

-----15. REGULATORY INFORMATION -----

COMMERCIAL CHEMICALS (EINECS)

THESE DATA ARE OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATIONS. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

THIS PRODUCT OR ITS COMPONENTS ARE ON THE AUSTRALIAN INVENTORY (ACQIN)

C = CEILING LIMIT

WEMIS TRADE SECRET: NONE

EXPORT:

B/HTSUS: 3910.00 SILICONES IN PRIMARY FORM  
EAR99

HAZARD RATING SYSTEMS:

HMIS:

FLAMMABILITY 0

REACTIVITY 0

HEALTH 1

NIHA

HEALTH - 1

FLAMMABILITY - 0

REACTIVITY - 0

CALIFORNIA PROPOSITION 65: NONE

-----16. OTHER INFORMATION -----

THIS PRODUCT OR ITS COMPONENTS ARE ON THE EUROPEAN INVENTORY OF EXISTING

NEGL - NEGLIGIBLE

EST - ESTIMATED

NF - NONE FOUND

NA - NOT APPLICABLE

UNKN - UNKNOWN

NE - NONE ESTABLISHED

REC - RECOMMENDED

ND - NONE DETERMINED

V - RECOMM. BY VENDOR

BY-PRODUCT - REACTION BY-PRODUCT, TSCA INVENTORY STATUS NOT REQUIRED UNDER

40 CFR PART 720.30 (H-2)

SKN - SKIN

TS - TRADE SECRET

R - RECOMMENDED

MST - MIST

STEL - SHORT TERM EXPOSURE LIMIT

NT - NOT TESTED

ALL CHEMICAL SUBSTANCES IN THIS MATERIAL ARE INCLUDED ON OR EXEMPTED FROM  
LISTING ON THE TSCA INVENTORY.

COPYRIGHT GENERAL ELECTRIC CO.

**Tarr, Inc**

2429 N Borthwick  
PO Box 12570  
Portland, Oregon 97212-0570  
Phone 503-288-5294  
800-422-5069  
Fax 503-288-0421

**March 13, 2003**

MARISC 000

**Tarr**  
MARINE SALVAGE CONSORTIUM  
6211 NE ENSIGN  
PORTLAND, OR 972173930

IN ACCORDANCE WITH THE HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FROM THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), WE ARE ENCLOSING A MATERIAL SAFETY DATA SHEET (MSDS) FOR THE FOLLOWING TARR PRODUCT(S):

Code	Description
ATF	CHEV ATF DEXRON III

THE MSDS SHOULD BE USED TO EDUCATE AND TRAIN YOUR EMPLOYEES ON THE PROPERTIES, HAZARDS, AND PROTECTION REQUIREMENTS RELATED TO THE PRODUCTS WHICH YOU PURCHASE FROM TARR, INC. IF YOU NEED ANY FURTHER MSDS, PLEASE CONTACT RACHEAL KERSEY AT (503) 821-8235.

SINCERELY YOURS,

PATRICIA RODABAUGH  
COMPLIANCE MANAGER

Arizona  
4115 W Turney Avenue  
Phoenix, Arizona 85019  
Phone 602-233-2000  
800-350-2436  
Fax 602-233-9190

Seattle  
4510 B Street NW  
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Phone 206-859-2979  
Fax 206-859-3020

Vancouver  
7208 NE St Johns Road  
Vancouver, Washington 98665  
Phone 360-694-2521  
From Portland 503-239-1566  
Fax 360-737-8537





# Material Safety Data Sheet

## 24-Hour Emergency Telephone Numbers

HEALTH : ChevronTexaco Emergency Information Center (800) 231-0623 or (510) 231-0623

TRANSPORTATION : CHEMTREC (800) 424-9300 or (703) 527-3887

Emergency Information Centers are located in the U.S.A. International collect calls accepted.

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

### CHEVRON Automatic Transmission Fluid DEXRON®-III/Mercon®

Product Number(s): CPS226502

Synonyms: Automatic Transmission Fluid, DEXRON® - III, MERCON®

#### Company Identification

ChevronTexaco Global Lubricants

6001 Bollinger Canyon Rd.

San Ramon, CA 94583

United States of America

www.chevron-lubricants.com

#### Product Information

MSDS Requests: (800) 414-6737

Product Information: (800) LUBE TEK

email: lubemsds@chevron.com

## SECTION 2: COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Distillates, hydrotreated heavy paraffinic	64742-54-7	75 - 89.99 %weight
Additives	Mixture	10 - 19.9 %weight

## SECTION 3: HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Red oily liquid.

### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause

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Revision Date: 08/05/2002

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CHEVRON Automatic Transmission  
Fluid DEXRON®-III/Mercon®  
MSDS : 21

respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

#### SECTION 4 FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

**Note to Physicians:** In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

#### SECTION 5 FIRE FIGHTING MEASURES

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

##### FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

##### FLAMMABLE PROPERTIES:

**Flashpoint:** (Cleveland Open Cup) 352 °F (178 °C) (Min)

**Autoignition:** NDA

**Flammability (Explosive) Limits (% by volume in air):** Lower: NA Upper: NA

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

##### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Sulfur, Phosphorus.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

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CHEVRON Automatic Transmission  
Fluid DEXRON-III/Mercon®  
MSDS : 21

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

#### SECTION 7 HANDLING AND STORAGE

**Precautionary Measures:** DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed. Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

#### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

##### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Special note: Do not use in breathing air apparatus or medical equipment.

##### ENGINEERING CONTROLS:

Use in a well-ventilated area.

##### PERSONAL PROTECTIVE EQUIPMENT

Revision Number: 29  
Revision Date: 08/05/2002

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CHEVRON Automatic Transmission  
Fluid DEXRON®-III/Mercon®  
MSDS : 21

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances.

Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Limit	TWA	STEL	Celling	Notation
Distillates, hydrotreated heavy paraffinic	OSHA PEL	5 mg/m3			
Distillates, hydrotreated heavy paraffinic	ACGIH TLV	5 mg/m3	10 mg/m3		

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Attention: the data below are typical values and do not constitute a specification.

**Appearance and Odor:** Red oily liquid.

**pH:** NA

**Vapor Pressure:** <0.01 mmHg @ 100 °F

**Vapor Density (Air = 1):** >1

**Boiling Point:** >600 °F (>315 °C)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** NA

**Melting Point:** NA

**Specific Gravity:** 0.86 @ 15.6 °C / 15.6 °C

**Viscosity:** 6.8 cSt @ 100 °C (Min)

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**IMMEDIATE HEALTH EFFECTS**

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

#### **ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

#### **SECTION 12 ECOLOGICAL INFORMATION**

##### **ECOTOXICITY**

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

##### **ENVIRONMENTAL FATE**

This material is not expected to be readily biodegradable.

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

#### **SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name:** NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**DOT Hazard Class:** NOT APPLICABLE

**DOT Identification Number:** NOT APPLICABLE

**DOT Packing Group:** NOT APPLICABLE

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

#### **SECTION 15 REGULATORY INFORMATION**

Revision Number: 29  
Revision Date: 08/05/2002

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CHEVRON Automatic Transmission  
Fluid DEXRON®-III/Mercon®  
MSDS : 21

**SARA 311/312 CATEGORIES:**

- |                                       |    |
|---------------------------------------|----|
| 1. Immediate (Acute) Health Effects:  | NO |
| 2. Delayed (Chronic) Health Effects:  | NO |
| 3. Fire Hazard:                       | NO |
| 4. Sudden Release of Pressure Hazard: | NO |
| 5. Reactivity Hazard:                 | NO |

**REGULATORY LISTS SEARCHED:**

- |                     |                         |
|---------------------|-------------------------|
| 4_I1=IARC Group 1   | 15=SARA Section 313     |
| 4_I2A=IARC Group 2A | 16=CA Proposition 65    |
| 4_I2B=IARC Group 2B | 17=MA RTK               |
| 05=NTP Carcinogen   | 18=NJ RTK               |
| 06=OSHA Carcinogen  | 19=DOT Marine Pollutant |
| 09=TSCA 12(b)       | 20=PA RTK               |

**CHEMICAL INVENTORIES:**

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL  
(Automatic transmission fluid)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16 OTHER INFORMATION**

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0  
**HMIS RATINGS:** Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** Changes have been made throughout this Material Safety Data Sheet. Please read the entire document.

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
NDA - No Data Available	CAS - Chemical Abstract Service Number
<= - Less Than or Equal To	NA - Not Applicable
	>= - Greater Than or Equal To

Revision Number: 29  
Revision Date: 08/05/2002

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CHEVRON Automatic Transmission  
Fluid DEXRON®-III/Mercon®  
MSDS : 21

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Revision Number: 29  
Revision Date: 08/05/2002

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CHEVRON Automatic Transmission  
Fluid DEXRON®-III/Mercon®  
MSDS : 21

**Tarr, Inc**

2429 N Borthwick  
PO Box 12570  
Portland, Oregon 97212-0570  
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800-422-5069  
Fax 503-288-0421

June 18, 2003

MARISC 000

**Tarr**  
MARINE SALVAGE CONSORTIUM  
6211 NE ENSIGN  
PORTLAND, OR 972173930

IN ACCORDANCE WITH THE HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FROM THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), WE ARE ENCLOSING A MATERIAL SAFETY DATA SHEET (MSDS) FOR THE FOLLOWING TARR PRODUCT(S):

Code	Description
------	-------------

D40040	CHEV DELO 400 40W
--------	-------------------

THE MSDS SHOULD BE USED TO EDUCATE AND TRAIN YOUR EMPLOYEES ON THE PROPERTIES, HAZARDS, AND PROTECTION REQUIREMENTS RELATED TO THE PRODUCTS WHICH YOU PURCHASE FROM TARR, INC. IF YOU NEED ANY FURTHER MSDS', PLEASE CONTACT DANA WARREN AT (503) 821-8235.

SINCERELY YOURS,

PATRICIA RODABAUGH  
COMPLIANCE MANAGER

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Phone 206-859-2979  
Fax 206-859-3020

Vancouver  
7208 NE St Johns Road  
Vancouver, Washington 98665  
Phone 360-694-2521  
From Portland 503-239-1566  
Fax 360-737-8537





## Material Safety Data Sheet

Chevron Delo® 400 Multigrade

MSDS: 6711 Revision #: 4 Revision Date: 8/16/2002

[Click here to search the product data sheet database](#)

Tarr Codes: D4001540  
D40010  
D4001030  
D40020  
D40030  
D40040  
D40050

## Material Safety Data Sheet

### 24-Hour Emergency Telephone Numbers

HEALTH : ChevronTexaco Emergency Information Center (800) 231-0623 or (510) 231-0623

TRANSPORTATION : CHEMTREC (800) 424-9300 or (703) 527-3887

Emergency Information Centers are located in the U.S.A. International collect calls accepted.

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### CHEVRON Delo® 400

Product Number(s): CPS235101, CPS235109, CPS235117, CPS235118, CPS235119, CPS235120, CPS235200

Synonyms: CHEVRON Delo® 400 Multigrade SAE 15W-40, CHEVRON Delo® 400 SAE 10W, CHEVRON Delo® 400 SAE 10W-30, CHEVRON Delo® 400 SAE 20, CHEVRON Delo® 400 SAE 30, CHEVRON Delo® 400 SAE 40, CHEVRON Delo® 400 SAE 50

#### Company Identification

ChevronTexaco Global Lubricants  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583  
United States of America  
[www.chevron-lubricants.com](http://www.chevron-lubricants.com)

#### Product Information

MSDS Requests: (800) 414-6737  
Product Information: (800) LUBE TEK  
email : [lubemsds@chevron.com](mailto:lubemsds@chevron.com)

### SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 94.99 %weight

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a415/3c...> 9/6/2002

Zinc dialkyldithiophosphate

68649-42-3

1 - 4.99 %weight

**SECTION 3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Dark brown liquid.

**IMMEDIATE HEALTH EFFECTS****Eye:** Not expected to cause prolonged or significant eye irritation.**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.**Ingestion:** Not expected to be harmful if swallowed.**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.**SECTION 4 FIRST AID MEASURES****Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.**SECTION 5 FIRE FIGHTING MEASURES****FIRE CLASSIFICATION:**

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0**FLAMMABLE PROPERTIES:****Flashpoint:** (Cleveland Open Cup) 392 °F (200 °C) (Min)**Autoignition:** NDA**Flammability (Explosive) Limits (% by volume in air):** Lower: NA Upper: NA**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.**PROTECTION OF FIRE FIGHTERS:****Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen, Phosphorus, Sulfur.

**Tarr, Inc**

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800-422-5069  
Fax 503-288-0421

April 30, 2003

MARISC 000

**Tarr**  
MARINE SALVAGE CONSORTIUM  
6211 NE ENSIGN  
PORTLAND, OR 972173930

IN ACCORDANCE WITH THE HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FROM THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), WE ARE ENCLOSING A MATERIAL SAFETY DATA SHEET (MSDS) FOR THE FOLLOWING TARR PRODUCT(S):

Code	Description
D4001540	CHEV DELO 400 15W/40

THE MSDS SHOULD BE USED TO EDUCATE AND TRAIN YOUR EMPLOYEES ON THE PROPERTIES, HAZARDS, AND PROTECTION REQUIREMENTS RELATED TO THE PRODUCTS WHICH YOU PURCHASE FROM TARR, INC. IF YOU NEED ANY FURTHER MSDS, PLEASE CONTACT DANA WARREN AT (503) 821-8235.

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Phoenix, Arizona 85019  
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800-350-2436  
Fax 602-233-9190

SINCERELY YOURS,

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Auburn, Washington 98001  
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Fax 206-859-3020

PATRICIA RODABAUGH  
COMPLIANCE MANAGER

**Vancouver**  
7208 NE St Johns Road  
Vancouver, Washington 98665  
Phone 360-694-2521  
From Portland 503-239-1566  
Fax 360-737-8537



**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

**SECTION 7 HANDLING AND STORAGE**

**Precautionary Measures:** Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Special note:** Do not use in breathing air apparatus or medical equipment.

**ENGINEERING CONTROLS:**

Use in a well-ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured

concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Limit	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH_TLV	5 mg/m3	10 mg/m3		
Highly refined mineral oil (C15 - C50)	OSHA_PEL	5 mg/m3			

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Attention: the data below are typical values and do not constitute a specification.

**Appearance and Odor:** Dark brown liquid.

**pH:** NA

**Vapor Pressure:** <0.01 mmHg @ 100 °F

**Vapor Density (Air = 1):** >1

**Boiling Point:** >600 °F (>315 °C)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** NA

**Melting Point:** NA

**Specific Gravity:** 0.88 - 0.88 @ 15.6 °C / 15.6 °C

**Volatile Organic**

**Compounds (VOC):** 1.1 %weight

**Viscosity:** 5 cSt - 18 cSt @ 100 °C (Min)

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** Hydrogen Sulfide (Elevated temperatures)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION****IMMEDIATE HEALTH EFFECTS**

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

**ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if oil is thoroughly removed by washing with soap and water.

**SECTION 12 ECOLOGICAL INFORMATION****ECOTOXICITY**

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

**ENVIRONMENTAL FATE**

This material is not expected to be readily biodegradable.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods. (See B.C. Reg. GY/92 Waste Management Act; R.R.O. 1990, Reg. 347 General-Waste Management; C.C.S.M.c. W40 The Waste Reduction and Prevention Act; N.S. Reg. 51/95 and N.S. Reg. 179/96 for examples of Provincial legislation.)

**SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name:** NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**DOT Hazard Class:** NOT APPLICABLE

**DOT Identification Number:** NOT APPLICABLE

**DOT Packing Group:** NOT APPLICABLE

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

**SECTION 15 REGULATORY INFORMATION**

**SARA 311/312 CATEGORIES:**

1. Immediate (Acute) Health Effects:	NO
2. Delayed (Chronic) Health Effects:	NO
3. Fire Hazard:	NO
4. Sudden Release of Pressure Hazard:	NO
5. Reactivity Hazard:	NO

**REGULATORY LISTS SEARCHED:**

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a415/3c...> 9/6/2002

Chevron Delo® 400 Multigrade MSDS#6711 Rev#4 (8/16/2002)

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4_11=IARC Group 1	15=SARA Section 313
4_12A=IARC Group 2A	16=CA Proposition 65
4_12B=IARC Group 2B	17=MA RTK
05=NTP Carcinogen	18=NJ RTK
06=OSHA Carcinogen	19=DOT Marine Pollutant
09=TSCA 12(b)	20=PA RTK

The following components of this material are found on the regulatory lists indicated.

Zinc dialkyldithiophosphate

15

**CERCLA REPORTABLE QUANTITIES(RQ)/SARA 302 THRESHOLD PLANNING QUANTITIES(TPQ):**

Component	Component RQ	Component TPQ	Product RQ
Zinc dialkyldithiophosphate	1 lbs	None	22 lbs

**CHEMICAL INVENTORIES:**

CANADA: All the components of this material are on the Canadian DSL or have been notified under the New Substance Notification Regulations, but have not yet been published in the Canada Gazette.

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China.

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

JAPAN: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:

PETROLEUM OIL (Motor oil)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16 OTHER INFORMATION**

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a415/3c...> 9/6/2002

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** Changes have been made throughout this Material Safety Data Sheet. Please read the entire document.

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value

TWA - Time Weighted Average

STEL - Short-term Exposure Limit

PEL - Permissible Exposure Limit

CAS - Chemical Abstract Service Number

NDA - No Data Available

NA - Not Applicable

<= - Less Than or Equal To

>= - Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



## Material Safety Data Sheet

Chevron Delo® 400 Multigrade

MSDS: 6711 Revision #: 4 Revision Date: 8/16/2002

[Click here to search the product data sheet database](#)

Tarr Codes: D4001540  
D400 10  
D400 1030  
D400 20  
D400 30  
D400 40  
D400 50

## Material Safety Data Sheet

### 24-Hour Emergency Telephone Numbers

HEALTH : ChevronTexaco Emergency Information Center (800) 231-0623 or (510) 231-0623

TRANSPORTATION : CHEMTREC (800) 424-9300 or (703) 527-3887

Emergency Information Centers are located in the U.S.A. International collect calls accepted.

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### CHEVRON Delo® 400

Product Number(s): CPS235101, CPS235109, CPS235117, CPS235118, CPS235119, CPS235120, CPS235200

Synonyms: CHEVRON Delo® 400 Multigrade SAE 15W-40, CHEVRON Delo® 400 SAE 10W, CHEVRON Delo® 400 SAE 10W-30, CHEVRON Delo® 400 SAE 20, CHEVRON Delo® 400 SAE 30, CHEVRON Delo® 400 SAE 40, CHEVRON Delo® 400 SAE 50

#### Company Identification

ChevronTexaco Global Lubricants  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583  
United States of America  
[www.chevron-lubricants.com](http://www.chevron-lubricants.com)

#### Product Information

MSDS Requests: (800) 414-6737  
Product Information: (800) LUBE TEK  
email : [lubemsds@chevron.com](mailto:lubemsds@chevron.com)

### SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 94.99 %weight

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a415/3c...> 9/6/2002

Zinc dialkyldithiophosphate

68649-42-3

1 - 4.99 %weight

**SECTION 3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Dark brown liquid.

**IMMEDIATE HEALTH EFFECTS****Eye:** Not expected to cause prolonged or significant eye irritation.**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.**Ingestion:** Not expected to be harmful if swallowed.**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.**SECTION 4 FIRST AID MEASURES****Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.**SECTION 5 FIRE FIGHTING MEASURES****FIRE CLASSIFICATION:**

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0**FLAMMABLE PROPERTIES:****Flashpoint:** (Cleveland Open Cup) 392 °F (200 °C) (Min)**Autoignition:** NDA**Flammability (Explosive) Limits (% by volume in air):** Lower: NA Upper: NA**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.**PROTECTION OF FIRE FIGHTERS:****Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen, Phosphorus, Sulfur.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

**SECTION 7 HANDLING AND STORAGE**

**Precautionary Measures:** Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Special note:** Do not use in breathing air apparatus or medical equipment.

**ENGINEERING CONTROLS:**

Use in a well-ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured

concentrations of this material. For air-purifying respirators use a particulate cartridge.  
Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Limit	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH_TLV	5 mg/m3	10 mg/m3		
Highly refined mineral oil (C15 - C50)	OSHA_PEL	5 mg/m3			

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Attention: the data below are typical values and do not constitute a specification.

**Appearance and Odor:** Dark brown liquid.

**pH:** NA

**Vapor Pressure:** <0.01 mmHg @ 100 °F

**Vapor Density (Air = 1):** >1

**Boiling Point:** >600 °F (>315 °C)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** NA

**Melting Point:** NA

**Specific Gravity:** 0.88 - 0.88 @ 15.6 °C / 15.6 °C

**Volatile Organic**

**Compounds (VOC):** 1.1 %weight

**Viscosity:** 5 cSt - 18 cSt @ 100 °C (Min)

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** Hydrogen Sulfide (Elevated temperatures)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION****IMMEDIATE HEALTH EFFECTS**

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

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**ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if oil is thoroughly removed by washing with soap and water.

**SECTION 12 ECOLOGICAL INFORMATION****ECOTOXICITY**

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

**ENVIRONMENTAL FATE**

This material is not expected to be readily biodegradable.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods. (See B.C. Reg. GY/92 Waste Management Act; R.R.O. 1990, Reg. 347 General-Waste Management; C.C.S.M.c. W40 The Waste Reduction and Prevention Act; N.S. Reg. 51/95 and N.S. Reg. 179/96 for examples of Provincial legislation.)

**SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name:** NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**DOT Hazard Class:** NOT APPLICABLE

**DOT Identification Number:** NOT APPLICABLE

**DOT Packing Group:** NOT APPLICABLE

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

**SECTION 15 REGULATORY INFORMATION**

**SARA 311/312 CATEGORIES:**

1. Immediate (Acute) Health Effects:	NO
2. Delayed (Chronic) Health Effects:	NO
3. Fire Hazard:	NO
4. Sudden Release of Pressure Hazard:	NO
5. Reactivity Hazard:	NO

**REGULATORY LISTS SEARCHED:**

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a415/3c...> 9/6/2002

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4_11=IARC Group 1	15=SARA Section 313
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4_12B=IARC Group 2B	17=MA RTK
05=NTP Carcinogen	18=NJ RTK
06=OSHA Carcinogen	19=DOT Marine Pollutant
09=TSCA 12(b)	20=PA RTK

The following components of this material are found on the regulatory lists indicated.

Zinc dialkyldithiophosphate

15

**CERCLA REPORTABLE QUANTITIES(RQ)/SARA 302 THRESHOLD PLANNING QUANTITIES(TPQ):**

Component	Component RQ	Component TPQ	Product RQ
Zinc dialkyldithiophosphate	1 lbs	None	22 lbs

**CHEMICAL INVENTORIES:**

CANADA: All the components of this material are on the Canadian DSL or have been notified under the New Substance Notification Regulations, but have not yet been published in the Canada Gazette.

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China.

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

JAPAN: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:

PETROLEUM OIL (Motor oil)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16 OTHER INFORMATION**

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0  
 HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0

<http://library.cbest.chevron.com/lubes/chevmsdsv9.nsf/f2f12b5992bba20488256b4c0074a15/3...> 9/6/2002

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(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** Changes have been made throughout this Material Safety Data Sheet. Please read the entire document.

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value

TWA - Time Weighted Average

STEL - Short-term Exposure Limit

PEL - Permissible Exposure Limit

CAS - Chemical Abstract Service Number

NDA - No Data Available

NA - Not Applicable

<= - Less Than or Equal To

>= - Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

# Material Safety Data Sheet

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### Chevron Open Gear Grease - Aerosol

**Product Use:** Grease

**Product Number(s):** CPS230001

**Company Identification**

ChevronTexaco Global Lubricants

6001 Bollinger Canyon Rd.

San Ramon, CA 94583

United States of America

www.chevron-lubricants.com

### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

### Health Emergency

ChevronTexaco Emergency Information Center: Located in the USA. International collect calls accepted.

(800) 231-0623 or (510) 231-0623

### Product Information

Email: lubemsds@chevrontexaco.com

Product Information: (800) LUBE TEK

MSDS Requests: (800) 414-6737

## SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Asphalt	8052-42-4	30 - 40 %weight
Heptane	142-82-5	20 - 30 %weight
Molybdenum disulphide	1317-33-5	1 - 5 %weight
Graphite	7782-42-5	1 - 5 %weight
Propellant :		20 - 30 %weight
Propane	74-98-6	< 30 %weight
Isobutane	106-97-8	< 30 %weight
Isobutane	75-28-5	< 30 %weight

**SECTION 3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

- EXTREMELY FLAMMABLE AEROSOL
- CAUSES EYE IRRITATION

**IMMEDIATE HEALTH EFFECTS**

**Eye:** Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Intentional misuse by deliberately inhaling this material may be harmful or fatal. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentrations above the recommended exposure limits may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

**SECTION 4 FIRST AID MEASURES**

**Eye:** Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

**SECTION 5 FIRE FIGHTING MEASURES****FIRE CLASSIFICATION:**

HA Classification (29 CFR 1910.1200): Flammable aerosol.

NFPA RATINGS: Health: 1 Flammability: 4 Reactivity: 0

-114-

**FLAMMABLE PROPERTIES:**

**Flashpoint:** (Tagliabue Closed Cup ASTM D56) -97 °C (-143 °F)

**Autoignition:** 404 °C (759 °F)

**Flammability (Explosive) Limits (% by volume in air):** Lower: 1.8 Upper: 9.5

**EXTINGUISHING MEDIA:** Dry Chemical, CO2, AFFF Foam or alcohol resistant foam.

**PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen .

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in the vicinity of the released aerosol.

**Spill Management:** Clean up spills immediately, observing precautions in Exposure Controls/Personal Protection section.

**Reporting:** Report spills to local authorities as appropriate or required.

**SECTION 7 HANDLING AND STORAGE**

**Precautionary Measures:** This material presents a fire hazard. It can catch fire and burn so vigorously and persistently that it creates a serious hazard. Do not breathe vapor or fumes. Do not get in eyes.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**General Storage Information:** DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

**Container Warnings:** Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user

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should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

**Skin Protection:** Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted.

Suggested materials for protective gloves include: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Nitrile Rubber, Viton.

**Respiratory Protection:** Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: Air-Purifying Respirator for Organic Vapors, or Supplied-Air Respirator.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Asphalt	ACGIH	.5 mg/m3	--	--	--
Butane	ACGIH	800 ppm (weight)	--	--	--
Graphite	ACGIH	2 mg/m3	--	--	--
Graphite	OSHA Z-1	5 mg/m3	--	--	--
Heptane	ACGIH	400 ppm (weight)	500 ppm (weight)	--	--
Heptane	OSHA Z-1	2000 mg/m3	--	--	--
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m3	--	--	--
Propane	ACGIH	1000 ppm	--	--	--
Propane	OSHA Z-1	1800 mg/m3	--	--	--

The ACGIH TLV is 0.5 mg/m3 as the benzene extractable portion of the inhalable fraction of asphalt fume. The TLV may also be determined by unspecified 'equivalent' methods.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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Attention: the data below are typical values and do not constitute a specification.

**Color:** Black

**Physical State:** Semi-solid

**Flammable:** Solvent

**pH:** Not Applicable

**Vapor Pressure:** 75 psi (Max)

**Vapor Density (Air = 1):** >1

**Boiling Point:** 40°C (104°F) - 145°C (293°F)

**Solubility:** Negligible

**Freezing Point:** Not Applicable

**Density:** 0.88

**Viscosity:** No data available

**Evaporation Rate:** <1

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:**

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

### ADDITIONAL TOXICOLOGY INFORMATION:

There is concern about the carcinogenicity of chemical compounds found in asphalts. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of asphalts in 1985 and again in 1987. At that time, they concluded there was inadequate evidence to decide that asphalts were carcinogenic to humans. Overall, findings from health monitoring studies of asphalt workers are not conclusive. However, asphalt fume condensates and certain chemical components of asphalt fume have been shown to cause cancer in mice when repeatedly applied to the skin and allowed to remain on the skin for a prolonged period of time. In addition, asphalt fume condensates have been shown to be weakly positive in Ames mutagenicity tests. Skin contact and breathing of fumes, mists and vapors should be

reduced to a minimum.

This product contains butane. An atmospheric concentration of 100,000 ppm (10%) butane is not noticeably irritating to the eyes, nose or respiratory tract, but will produce slight dizziness in a few minutes of exposure. No chronic systemic effect has been reported from occupational exposure.

This product contains isobutane. Isobutane has been shown to increase airway resistance by bronchioconstriction and decrease pulmonary compliance and tidal volume (difficulty in breathing). Air containing 27% isobutane was found to decrease respiratory rate and proved to be fatal to rats.

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

## SECTION 12 ECOLOGICAL INFORMATION

### TOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

### ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

## SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description: AEROSOLS, 2.1, UN1950, LIMITED QUANTITIES**

ICAO/IATA Shipping Description: AEROSOL, FLAMMABLE, 2.1, UN1950

## SECTION 15 REGULATORY INFORMATION

- EPCRA 311/312 CATEGORIES:**
1. Immediate (Acute) Health Effects: YES
  2. Delayed (Chronic) Health Effects: NO
  3. Fire Hazard: YES
  4. Sudden Release of Pressure Hazard: YES
  5. Reactivity Hazard: NO

### REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

The following components of this material are found on the regulatory lists indicated.

Asphalt	05, 06, 07
Butane	05, 06, 07
Graphite	05, 07
Heptane	05, 06, 07
Isobutane	05, 06, 07
Molybdenum disulphide	05, 06
Propane	05, 06, 07

### CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan).

### NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Grease)

### WHMIS CLASSIFICATION:

Class B, Division 5: Flammable Aerosols  
Class D, Division 2, Subdivision B: Toxic Material -  
Skin or Eye Irritation

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**SECTION 16 OTHER INFORMATION****PA RATINGS:** Health: 1 Flammability: 4 Reactivity: 0**HMIS RATINGS:** Health: 1 Flammability: 4 Reactivity: 0 PPE: C

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**LABEL RECOMMENDATION:**

Label Category : AEROSOL 1

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet:  
1-16

Revision Date: 07/16/2004

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - ChevronTexaco	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



# Material Safety Data Sheet

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

### Chevron RPM® Universal Gear Lubricant

**Product Number(s):** CPS225039, CPS225040

**Synonyms:** Chevron RPM® Universal Gear Lubricant SAE 80W-90, Chevron RPM® Universal Gear Lubricant SAE 85W-140

#### Company Identification

ChevronTexaco Global Lubricants  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583  
United States of America  
www.chevron-lubricants.com

#### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

#### Health Emergency

ChevronTexaco Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

#### Product Information

email : lubemsds@chevron.com  
Product Information: (800) LUBE TEK  
MSDS Requests: (800) 414-6737

## SECTION 2: COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Non-hazardous additive blend in refined oil	Mixture	100 %weight

## SECTION 3: HAZARDS IDENTIFICATION

### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

#### SECTION 4 FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

#### SECTION 5 FIRE FIGHTING MEASURES

##### FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

##### FLAMMABLE PROPERTIES:

**Flashpoint:** (Cleveland Open Cup) 180 °C (356 °F) (Min)

**Autoignition:** NDA

**Flammability (Explosive) Limits (% by volume in air):** Lower: NA Upper: NA

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

##### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Phosphorus, Sulfur.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

#### SECTION 7 HANDLING AND STORAGE

**Precautionary Measures:** Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge

and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Non-hazardous additive blend in refined oil	ACGIH	5 mg/m3	10 mg/m3		
Non-hazardous additive blend in refined oil	OSHA Z-1	5 mg/m3			

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Brown

**Physical State:** Liquid  
**Odor:** Petroleum odor  
**pH:** NA  
**Vapor Pressure:** <0.01 mmHg @ 37.8°C (100°F)  
**Vapor Density (Air = 1):** >1  
**Boiling Point:** >371°C (699.8°F)  
**Solubility:** Soluble in hydrocarbons; insoluble in water  
**Freezing Point:** NA **Melting Point:** NA  
**Specific Gravity:** 0.88 - 0.91 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)  
**Viscosity:** 13.7 cSt @ 100°C (212°F) (Min)

#### SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** Hydrogen Sulfide (Temperatures >149 °F (65 °C))

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

##### ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

#### SECTION 12. ECOLOGICAL INFORMATION

##### ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

##### ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

### SECTION 13 DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

### SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name:** NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**DOT Hazard Class:** NOT APPLICABLE

**DOT Identification Number:** NOT APPLICABLE

**DOT Packing Group:** NOT APPLICABLE

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

**IMO/IMDG Shipping Name:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER THE IMDG CODE

**IMO/IMDG Hazard Class:** NOT APPLICABLE

**IMO/IMDG Identification Number:** NOT APPLICABLE

**IMO/IMDG Packing Group:** NOT APPLICABLE

### SECTION 15 REGULATORY INFORMATION

#### EPCRA 311/312 CATEGORIES:

1. Immediate (Acute) Health Effects:	NO
2. Delayed (Chronic) Health Effects:	NO
3. Fire Hazard:	NO
4. Sudden Release of Pressure Hazard:	NO
5. Reactivity Hazard:	NO

#### REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=DOT Marine Pollutant
	08=PA RTK

No components of this material were found on the regulatory lists above.

#### CHEMICAL INVENTORIES:

**AUSTRALIA:** All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

**CANADA:** All the components of this material are on the Canadian Domestic Substances List (DSL).

**EUROPEAN UNION:** All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

**JAPAN:** All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

**KOREA:** All the components of this product are on the Existing Chemicals List (ECL) in Korea.

**PHILIPPINES:** All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

**UNITED STATES:** All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Gear oil)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16: OTHER INFORMATION**

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

**HMIS RATINGS:** Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet: 1, 2, 5, 8, 9, 11, 14, 15

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
CVX	-	ChevronTexaco	CAS	-	Chemical Abstract Service Number
NDA	-	No Data Available	NA	-	Not Applicable
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

## ITEM: 4ZF44 - GREASE AUTOMOTIVE

PICK REQ: 1129482439

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A4969

This MSDS should be attached or kept with the respective product with which it is associated.

\*\*\*\*\*  
MATERIAL SAFETY DATA SHEET - A4969

Associated Grainger Item: 4ZF44 - GREASE AUTOMOTIVE

530550-00 MOBILGREASE XHP 222 SPECIAL

MATERIAL SAFETY DATA BULLETIN

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBILGREASE XHP 222 SPECIAL

SUPPLIER:  
EXXONMOBIL CORPORATION  
3225 GALLOWAY RD.  
FAIRFAX, VA 22037

24 - HOUR HEALTH AND SAFETY EMERGENCY (CALL COLLECT): (609-737-4411)

24 - HOUR TRANSPORTATION EMERGENCY:  
(PRIMARY) CHEMTREC: 800-424-9300  
(SECONDARY): 281-834-3296

## PRODUCT AND TECHNICAL INFORMATION:

LUBRICANTS AND SPECIALTIES:  
800-662-4525  
800-443-9966

FUELS PRODUCTS: 800-947-9147

MSDS FAX ON DEMAND: 613-228-1467

MSDS INTERNET WEBSITE: HTTP://EMMSDS.IHSSOLUTIONS.COM/

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SEVERE TREAT MIN. OILS &amp; ADDITIVES

## GLOBALLY REPORTABLE MSDS INGREDIENTS:

SUBSTANCE NAME APPROX. WT%

ZINC DIALKYL DITHIOPHOSPHATE 1-5  
(68649-42-3)

SEE SECTION 8 FOR EXPOSURE LIMITS (IF APPLICABLE).

## 3. HAZARDS IDENTIFICATION

UNDER NORMAL CONDITIONS OF USE, THIS PRODUCT IS NOT CONSIDERED HAZARDOUS  
ACCORDING TO REGULATORY GUIDELINES (SEE SECTION 15).

AGENCY OVERVIEW: GRAY TO BLACK GREASE.

DOT ERG NO.: NA

## POTENTIAL HEALTH EFFECTS:

UNDER NORMAL CONDITIONS OF INTENDED USE, THIS PRODUCT DOES NOT POSE A RISK  
TO HEALTH. EXCESSIVE EXPOSURE MAY RESULT IN EYE, SKIN OR RESPIRATORY  
IRRITATION.

FOR FURTHER HEALTH EFFECTS/TOXICOLOGICAL DATA, SEE SECTION 11.

## 4. FIRST AID MEASURES

## EYE CONTACT:

FLUSH THOROUGHLY WITH WATER. IF IRRITATION OCCURS, CALL A PHYSICIAN.

## SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER. REMOVE AND CLEAN OIL SOAKED CLOTHING  
DAILY AND WASH AFFECTED AREA.

## INJECTION INJURY WARNING:

IF PRODUCT IS INJECTED INTO OR UNDER THE SKIN, OR INTO ANY PART OF THE BODY,  
REGARDLESS OF THE APPEARANCE OF THE WOUND OR ITS SIZE, THE INDIVIDUAL SHOULD  
BE EVALUATED IMMEDIATELY BY A PHYSICIAN AS A SURGICAL EMERGENCY. EVEN THOUGH  
INITIAL SYMPTOMS FROM HIGH PRESSURE INJECTION MAY BE MINIMAL OR ABSENT,  
EARLY SURGICAL TREATMENT WITHIN THE FIRST FEW HOURS MAY SIGNIFICANTLY REDUCE  
THE ULTIMATE EXTENT OF INJURY.

## INHALATION:

REMOVE FROM FURTHER EXPOSURE. IF RESPIRATORY IRRITATION, DIZZINESS, NAUSEA,  
OR UNCONSCIOUSNESS OCCURS, SEEK IMMEDIATE MEDICAL ASSISTANCE. IF BREATHING  
HAS STOPPED, ASSIST VENTILATION WITH MECHANICAL DEVICE OR USE MOUTH-TO-MOUTH  
RESUSCITATION.

## INGESTION:

NOT EXPECTED TO BE A PROBLEM. SEEK MEDICAL ATTENTION IF DISCOMFORT OCCURS.  
DO NOT INDUCE VOMITING.

## 5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

## FIRE FIGHTING PROCEDURES:

FOAM OR WATER MAY CAUSE FROTHING. USE WATER TO KEEP FIRE EXPOSED CONTAINERS  
COOL. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURE. PREVENT  
RUNOFF FROM FIRE CONTROL OR DILUTION FROM ENTERING STREAMS, SEWERS, OR  
DRAINAGE WATER SUPPLY.

## SPECIAL PROTECTIVE EQUIPMENT:

FOR FIRES IN ENCLOSED AREAS, FIRE FIGHTERS MUST USE SELF-CONTAINED BREATHING  
APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE.

## COMBUSTION PRODUCTS:

FUMES, SMOKE, CARBON MONOXIDE, SULFUR OXIDES, ALDEHYDES AND OTHER  
DECOMPOSITION PRODUCTS, IN THE CASE OF INCOMPLETE COMBUSTION.

FLASH POINT C (P): &gt;204 (400) (ESTIMATED FOR OIL, ASTM D-92 (COC)).

FLAMMABLE LIMITS (APPROX. % VOL. IN AIR) -

LEL: NE

UEL: NE

NFPA HAZARD ID:

HEALTH: 0

FLAMMABILITY: 1

REACTIVITY: 0

## 6. ACCIDENTAL RELEASE MEASURES

## NOTIFICATION PROCEDURES:

REPORT SPILLS/RELEASES AS REQUIRED TO APPROPRIATE AUTHORITIES. U.S. COAST  
GUARD AND EPA REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS/RELEASES  
THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT  
SPILL/RELEASE TO COAST GUARD NATIONAL RESPONSE CENTER TOLL FREE NUMBER (800)  
424-8802. IN CASE OF ACCIDENT OR ROAD SPILL NOTIFY CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

## LAND SPILL:

SHUT OFF SOURCE TAKING NORMAL SAFETY PRECAUTIONS. TAKE MEASURES TO MINIMI  
THE EFFECTS ON GROUND WATER. RECOVER BY PUMPING OR CONTAIN SPILLED MATERIAL  
WITH SAND OR OTHER SUITABLE ABSORBENT AND REMOVE MECHANICALLY INTO  
CONTAINERS. IF NECESSARY, DISPOSE OF ADSORBED RESIDUES AS DIRECTED IN  
SECTION 13.

## WATER SPILL:

CONTINUE THE SPILL IMMEDIATELY WITH BOOMS. WARN OTHER SHIPS IN THE VICINITY.  
NOTIFY PORT AND OTHER RELEVANT AUTHORITIES. REMOVE FROM THE SURFACE BY  
SKIMMING OR WITH SUITABLE ABSORBENTS. IF PERMITTED BY REGULATORY AUTHORITIES  
THE USE OF SUITABLE DISPERSANTS SHOULD BE CONSIDERED WHERE RECOMMENDED IN  
LOCAL OIL SPILL PROCEDURES.

## ENVIRONMENTAL PRECAUTIONS:

PREVENT MATERIAL FROM ENTERING SEWERS, WATER SOURCES OR LOW LYING AREAS;  
ADVISE THE RELEVANT AUTHORITIES IF IT HAS, OR IF IT CONTAMINATES  
SOIL/VEGETATION.

PERSONAL PRECAUTIONS: SEE SECTION 8

## 7. HANDLING AND STORAGE

## HANDLING:

HIGH PRESSURE INJECTION UNDER THE SKIN MAY OCCUR DUE TO THE RUPTURE OF  
PRESSURIZED LINES. ALWAYS SEEK MEDICAL ATTENTION. NO SPECIAL PRECAUTIONS  
ARE NECESSARY BEYOND NORMAL GOOD HYGIENE PRACTICES. SEE SECTION 8 FOR  
ADDITIONAL PERSONAL PROTECTION ADVICE WHEN HANDLING THIS PRODUCT.

## STORAGE:

KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT STORE IN OPEN OR UNLABELLED  
CONTAINERS. STORE AWAY FROM STRONG OXIDIZING AGENTS AND COMBUSTIBLE  
MATERIALS. DO NOT STORE NEAR HEAT, SPARKS, FLAME OR STRONG OXIDANTS.

SPECIAL PRECAUTIONS: PREVENT SMALL SPILLS AND LEAKAGES TO AVOID SLIP HAZARD.

## EMPTY CONTAINER WARNING:

EMPTY CONTAINERS RETAIN RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS.  
DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH  
CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF  
IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. DO NOT ATTEMPT TO  
REFILL OR CLEAN CONTAINER SINCE RESIDUE IS DIFFICULT TO REMOVE. EMPTY DRU  
SHOULD BE COMPLETELY DRAINED, PROPERLY RINSED AND PROMPTLY RETURNED TO A  
DRUM RECONDITIONER. ALL CONTAINERS SHOULD BE DISPOSED OF IN AN  
ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## OCCUPATIONAL EXPOSURE LIMITS:

THIS PRODUCT DOES NOT CONTAIN ANY COMPONENTS WHICH HAVE RECOGNIZED EXPOSU  
LIMITS.

VENTILATION: USE ADEQUATE VENTILATION.

## RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE  
VENTILATION.

## EYE PROTECTION:

GENERALLY EYE CONTACT IS UNLIKELY WITH THIS TYPE MATERIAL. IF EYE CONTACT IS  
LIKELY, SAFETY GLASSES WITH SIDE SHIELDS OR CHEMICAL TYPE GOGGLES SHOULD BE  
WORN.

## SKIN PROTECTION:

IF PROLONGED OR REPEATED SKIN CONTACT IS LIKELY, OIL IMPERVIOUS GLOVES  
SHOULD BE WORN. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES ARE GIVEN BELOW. CONSULT PRODUCT DATA SHEET FOR  
SPECIFIC DETAILS.

APPEARANCE: GREASE

COLOR: GRAY TO BLACK

ODOR: MILD

ODOR THRESHOLD-PPM: NE

PH: NA

BOILING POINT C(F): >316(600)

DROP POINT C(F): >260(500)

FLASH POINT C(F): >204(400) (ESTIMATED FOR OIL, ASTM D-92 (COC))

FLAMMABILITY (SOLIDS): NE

FLAMMABILITY C(F): NA

EXPLOSIVE PROPERTIES: NA

OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-MM HG 20 C: <0.1

VAPOR DENSITY: NE

EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 0.914

SOLUBILITY IN WATER: NEGLIGIBLE

PARTITION COEFFICIENT: >3.5

VISCOSITY AT 40 C, CST: 220.0

VISCOSITY AT 100 C, CST: >16.0

POUR POINT C(F): NA

FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: NE

NOTE: MOST PHYSICAL PROPERTIES FOR OIL COMPONENT.

DMSO EXTRACT, IP-346 (WT.%): <3, FOR MINERAL OIL ONLY

NA=NOT APPLICABLE  
NE=NOT ESTABLISHED  
D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

#### 10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): STABLE.

CONDITIONS TO AVOID: EXTREME HEAT AND HIGH ENERGY SOURCES OF IGNITION.

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

PRODUCT DOES NOT DECOMPOSE AT AMBIENT TEMPERATURES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

#### 11. TOXICOLOGICAL DATA

ACUTE TOXICOLOGY:

ORAL TOXICITY (RATS):  
PRACTICALLY NON-TOXIC (LD50: GREATER THAN 2000 MG/KG).  
BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY (RABBITS):  
PRACTICALLY NON-TOXIC (LD50: GREATER THAN 2000 MG/KG).  
BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY (RATS):  
PRACTICALLY NON-TOXIC (LC50: GREATER THAN 5 MG/L).  
BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

EYE IRRITATION (RABBITS):  
PRACTICALLY NON-IRRITATING. (DRAIZE SCORE: GREATER THAN 6 BUT 15 OR LESS).  
BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION (RABBITS):  
PRACTICALLY NON-IRRITATING. (PRIMARY IRRITATION INDEX: GREATER THAN 0.5 BUT LESS THAN 3).  
BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

OTHER ACUTE TOXICITY DATA:  
ALTHOUGH AN ACUTE INHALATION STUDY WAS NOT PERFORMED WITH THIS PRODUCT, A VARIETY OF MINERAL OILS AND SYNTHETIC BASE OILS, SUCH AS THOSE IN THIS PRODUCT HAVE BEEN TESTED. THESE SAMPLES HAD VIRTUALLY NO EFFECT OTHER THAN A NONSPECIFIC INFLAMMATORY RESPONSE IN THE LUNG TO THE AEROSOLIZED MINERAL OIL.

THE PRESENCE OF ADDITIVES IN OTHER TESTED FORMULATIONS (IN APPROXIMATELY THE SAME AMOUNTS AS IN THE PRESENT FORMULATION) DID NOT ALTER THE OBSERVED EFFECTS.

SUBCHRONIC TOXICOLOGY (SUMMARY):  
NO SIGNIFICANT ADVERSE EFFECTS WERE FOUND IN STUDIES USING REPEATED DERMAL APPLICATIONS OF SIMILAR FORMULATIONS TO THE SKIN OF LABORATORY ANIMALS FOR 13 WEEKS AT DOSES SIGNIFICANTLY HIGHER THAN THOSE EXPECTED DURING NORMAL INDUSTRIAL EXPOSURE. THE ANIMALS WERE EVALUATED EXTENSIVELY FOR EFFECTS OF EXPOSURE (HEMATOLOGY, SERUM CHEMISTRY, URINALYSIS, ORGAN WEIGHTS, MICROSCOPIC EXAMINATION OF TISSUES ETC.).

REPRODUCTIVE TOXICOLOGY (SUMMARY):  
MUTAGENIC EFFECTS WOULD BE EXPECTED FROM DERMAL EXPOSURE, BASED ON LABORATORY DEVELOPMENTAL TOXICITY STUDIES OF MAJOR COMPONENTS IN THIS FORMULATION AND/OR MATERIALS OF SIMILAR COMPOSITION.

CHRONIC TOXICOLOGY (SUMMARY):  
REPEATED AND/OR PROLONGED EXPOSURE MAY CAUSE IRRITATION TO THE SKIN, EYES OR RESPIRATORY TRACT. FOR MINERAL BASE OILS: BASE OILS IN THIS PRODUCT ARE SEVERELY SOLVENT REFINED AND/OR SEVERELY HYDROTREATED. CHRONIC MOUSE SKIN PAINTING STUDIES OF SEVERELY TREATED OILS SHOWED NO EVIDENCE OF CARCINOGENIC

EFFECTS. THESE RESULTS ARE CONFIRMED ON A CONTINUING BASIS USING VARIOUS SCREENING METHODS SUCH AS MODIFIED AMES TEST, IP-346, AND/OR OTHER ANALYTICAL METHODS. FOR SYNTHETIC BASE OILS: THE BASE OILS IN THIS PRODUCT HAVE BEEN TESTED IN THE AMES ASSAY AND OTHER TESTS OF MUTAGENICITY WITH NEGATIVE RESULTS. THESE BASE OILS ARE NOT EXPECTED TO BE CARCINOGENIC WITH CHRONIC DERMAL EXPOSURES.

SENSITIZATION (SUMMARY):  
NOT EXPECTED TO BE SENSITIZING BASED ON TESTS OF THIS PRODUCT, COMPONENTS, OR SIMILAR PRODUCTS.

#### 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:  
THIS ENVIRONMENTAL ASSESSMENT WAS CONDUCTED USING INFORMATION ON THE INDIVIDUAL COMPONENTS AS NO TEST DATA WAS AVAILABLE FOR THIS SPECIFIC FORMULATION.

ECOTOXICITY:  
THE MAJOR COMPONENTS IN THE FORMULATION SHOW NO AQUATIC TOXICITY AT 1000 MG/L LOADING, THEREFORE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT ARE NOT EXPECTED.

MOBILITY: NOT ESTABLISHED.

PERSISTENCE AND DEGRADABILITY:  
THIS PRODUCT IS EXPECTED TO BE INHERENTLY BIODEGRADABLE, AS THE PRINCIPAL COMPONENTS HAVE BEEN SHOWN TO DEGRADE AT SLOW TO MODERATE RATES.

BIOACCUMULATIVE POTENTIAL: NOT ESTABLISHED.

#### 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:  
PRODUCT IS SUITABLE FOR BURNING IN AN ENCLOSED, CONTROLLED BURNER FOR FUEL VALUE. SUCH BURNING MAY BE LIMITED PURSUANT TO THE RESOURCE CONSERVATION AND RECOVERY ACT. IN ADDITION, THE PRODUCT IS SUITABLE FOR PROCESSING BY AN APPROVED RECYCLING FACILITY OR CAN BE DISPOSED OF AT AN APPROPRIATE GOVERNMENT WASTE DISPOSAL FACILITY. USE OF THESE METHODS IS SUBJECT TO USER COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS AND CONSIDERATION OF PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

RCRA INFORMATION:  
THE UNUSED PRODUCT, IN OUR OPINION, IS NOT SPECIFICALLY LISTED BY THE EPA AS A HAZARDOUS WASTE (40 CFR, PART 261D), NOR IS IT FORMULATED TO CONTAIN MATERIALS WHICH ARE LISTED HAZARDOUS WASTES. IT DOES NOT EXHIBIT THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSIVITY, OR REACTIVITY. THE UNUSED PRODUCT IS NOT FORMULATED WITH SUBSTANCES COVERED BY THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP). HOWEVER, USED PRODUCT MAY BE REGULATED.

#### 14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

#### 15. REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD:  
WHEN USED FOR ITS INTENDED PURPOSES, THIS PRODUCT IS NOT CLASSIFIED AS HAZARDOUS IN ACCORDANCE WITH OSHA 29 CFR 1910.1200.

EU LABELING:  
PRODUCT IS NOT DANGEROUS AS DEFINED BY THE EUROPEAN UNION DANGEROUS SUBSTANCES/PREPARATIONS DIRECTIVES. EU LABELING NOT REQUIRED.

GOVERNMENTAL INVENTORY STATUS:  
ALL COMPONENTS COMPLY WITH TSCA, EINECS/ELINCS AND AICS.

U.S. SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III:  
THIS PRODUCT CONTAINS NO "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: NONE.

THIS PRODUCT CONTAINS THE FOLLOWING SARA (313) TOXIC RELEASE CHEMICALS:

CHEMICAL NAME	CAS NUMBER	CONC.
PHOSPHORODITHIOIC ACID, O,O-DI C1-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP)	68649-42-3	1.3%

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
LITHIUM HYDROXIDE MONOHYDRATE (0.05%)	1310-66-3	22
TRICRESYL PHOSPHATE (>0.01%)	1330-78-5	22
ZINC (ELEMENTAL ANALYSIS) (0.18%)	7440-66-6	22
LITHIUM-SOAP THICKENER (6.14%)	7620-77-1	22
ZINC DINONYLNAPHTHALENE SULFONATE (0.40%)	28016-00-4	22
PHOSPHORODITHIOIC ACID, O,O-DI C1-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP) (1.29%)	68649-42-3	18, 20, 21, 22, 24 25
FATTY ACIDS, C16-22, LITHIUM SALTS (0.76%)	68783-36-8	22

REGULATORY LISTS SEARCHED:

1=ACGIH ALL  
2=ACGIH A1  
3=ACGIH A2  
4=NTP CARC  
5=NTP SUS

6=IARC 1  
 7=IARC 2A  
 8=IARC 2B  
 9=OSHA CARC  
 10=OSHA Z  
 11=TSCA 4  
 12=TSCA 5A2  
 13=TSCA 5E  
 14=TSCA 6  
 15=TSCA 12B  
 16=P65 CARC  
 17=P65 REPRO  
 18=LA RTK  
 19=PL RTK  
 20=IL RTK  
 21=LA RTK  
 22=MI 293  
 23=MN RTK  
 24=NJ RTK  
 25=PA RTK  
 26=RI RTK

CODE KEY:  
 CARC=CARCINOGEN  
 SUS=SUSPECTED CARCINOGEN  
 REPRO=REPRODUCTIVE

# 16. OTHER INFORMATION

USE: AUTOMOTIVE GREASE

NOTE:  
 PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBs. HEALTH STUDIES HAVE SHOWN THAT MANY HYDROCARBONS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON. INFORMATION PROVIDED ON THIS MSDS REFLECTS INTENDED USE. THIS PRODUCT SHOULD NOT BE USED FOR OTHER APPLICATIONS. IN ANY CASE, THE FOLLOWING ADVICE SHOULD BE CONSIDERED:

INDUSTRIAL LABEL:  
 UNDER NORMAL CONDITIONS OF INTENDED USE, THIS PRODUCT DOES NOT POSE A RISK TO HEALTH. EXCESSIVE EXPOSURE MAY RESULT IN EYE, SKIN OR RESPIRATORY IRRITATION. ALWAYS OBSERVE GOOD HYGIENE MEASURES. FIRST AID: WASH SKIN WITH SOAP AND WATER. FLUSH EYES WITH WATER. IF OVERCOME BY FUMES OR VAPOR, REMOVE TO FRESH AIR. IF INGESTED DO NOT INDUCE VOMITING. IF SYMPTOMS PERSIST SEEK MEDICAL ASSISTANCE. READ AND UNDERSTAND THE MSDS BEFORE USING THIS PRODUCT.

FOR INTERNAL USE ONLY:  
 MHC: 1\* 1\* 1\* 1\* 1\*  
 MPPEC: A  
 TRN: 530550-00  
 CMCS97: 97G870  
 REQ: US - MARKETING  
 SAFE USE: L

EHS APPROVAL DATE: 21AUG2001

LEGALLY REQUIRED INFORMATION IS GIVEN IN ACCORDANCE WITH APPLICABLE INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT WARRANTY. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. THIS DOCUMENT IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING ANY LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS. USE OR RETRANSMISSION OF THE INFORMATION CONTAINED HEREIN IN ANY OTHER FORMAT THAN THE FORMAT AS PRESENTED IS STRICTLY PROHIBITED. MOBIL NEITHER REPRESENTS NOR WARRANTS THAT THE FORMAT, CONTENT OR PRODUCT FORMULAS CONTAINED IN THIS DOCUMENT COMPLY WITH THE LAWS OF ANY OTHER COUNTRY EXCEPT THE UNITED STATES OF AMERICA.

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## ITEM: 4NA76 - Oil Multi Purpose 4 Oz

PICK REQ: 1033300054

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A6365

**This MSDS should be attached or kept with the respective product with which it is associated.**

MATERIAL SAFETY DATA SHEET - A6365

Associated Grainger Item: 4NA76 - Oil Multi Purpose 4 Oz

## MATERIAL SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ZOOM SPOUT OILER

REVISION #: 2.2

DATE PREPARED: MAY 22, 1991

DATE REVISED: APRIL 7, 2004

MANUFACTURER:  
LA-CO INDUSTRIES, INC./MARKAL CO.  
1201 PRATT BLVD.  
ELK GROVE VILLAGE, IL 60007-5746  
USA

INFORMATION TELEPHONE: 847-956-7600

EMERGENCY TELEPHONE: CALL CHEMTREC  
USA: 800-424-9300

INTERNATIONAL (CALL COLLECT): 1-703-527-3887

CHEMICAL FORMULA: MIXTURE

CAS NO.: NOT APPLICABLE.

DERIVATION: NOT APPLICABLE.

SYNONYMS: NOT APPLICABLE.

GENERAL USE: GENERAL PURPOSE LUBRICATING OIL

SUPPLIER/IMPORTER:

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	%
OIL MIST OSHA TLV (TWA): 5 MG/M3	64742-65-0	100

## SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:  
HARMFUL BY INHALATION AND IF SWALLOWED. MAY CAUSE LUNG DAMAGE IF SWALLOWED.  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FOOD AND DRINK. DO NOT BREATHE VAPOR OR SPRAY. AVOID CONTACT WITH SKIN AND EYES. IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. DO NOT EMPTY INTO DRAINS. WEAR SUITABLE PROTECTIVE CLOTHING. IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER, LABEL OR SAFETY DATA SHEET.

POTENTIAL HEALTH EFFECTS:

PRIMARY EXPOSURE ROUTES: EYES, SKIN, INGESTION, INHALATION

ACUTE EFFECTS:

EYES:  
MAY CAUSE EYE IRRITATION. DIRECT CONTACT MAY CAUSE BURNING, TEARING AND REDNESS.

SKIN:  
MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY CAUSE REDNESS, BURNING AND DERMATITIS.

INGESTION: MAY CAUSE IRRITATION OF THE DIGESTIVE TRACT.

INHALATION:  
EXPOSURE TO MISTS, OR PROLONGED OR REPEATED EXPOSURE TO FUMES OR VAPORS THAT MAY BE GENERATED WHEN THIS MATERIAL IS HEATED, MAY CAUSE IRRITATION OF NOSE AND THROAT.

CHRONIC EFFECTS:  
EYES: NOT DETERMINED.  
SKIN: NOT DETERMINED.  
INGESTION: NOT DETERMINED.  
INHALATION: NOT DETERMINED.

CARCINOGENICITY: NOT APPLICABLE.

TARGET ORGANS EFFECTS: NOT APPLICABLE.

MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE: NOT DETERMINED.

OTHER INFORMATION: NOT APPLICABLE.

## SECTION 4 FIRST AID

CONTACT:  
DIRECT CONTACT, FLUSH EYES WITH PLENTY OF CLEAN WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN.

SKIN CONTACT:  
DO NOT USE GASOLINE, THINNERS OR SOLVENTS TO REMOVE PRODUCT FROM SKIN. WIPE PRODUCT FROM SKIN WITH ABSORBENT CLOTH OR PAPER AND REMOVE CONTAMINATED CLOTHING. CLEANSE AFFECTED AREAS THOROUGHLY BY WASHING WITH SOAP AND WATER AND, IF NECESSARY, A WATERLESS SKIN CLEANER. IF

IRRITATION OR REDNESS DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INGESTION:  
IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2 TO 3 CUPS OF MILK OR WATER TO DRINK. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL ATTENTION.

TO PHYSICIAN:  
EMESIS OR LAVAGE IS NOT RECOMMENDED FOR INGESTION OF MINUTE QUANTITIES OR TASTES OF MOST HYDROCARBONS. MEDICAL OPINION IS DIVIDED FOR LARGER INGESTION. EMESIS OR LAVAGE HAS BEEN RECOMMENDED FOR THOSE PETROLEUM PRODUCTS WHICH HAVE A HIGH ORAL TOXICITY. GASTRIC LAVAGE WITH A CUFFED ENDOTRACHEAL TUBE IS RECOMMENDED BY SOME PHYSICIANS TO PREVENT ASPIRATION.

INHALATION:  
IF IRRITATION OF NOSE OR THROAT DEVELOPS, MOVE AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. IF VICTIM IS NOT BREATHING OR IF BREATHING DIFFICULTIES DEVELOP, ARTIFICIAL RESPIRATION OR OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK IMMEDIATE MEDICAL ATTENTION.

OTHER INFORMATION: NONE.

## SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT (METHOD): 388 DEG. F / 198 DEG. C (COC)

AUTOIGNITION TEMPERATURE: NOT DETERMINED.

LEL: NOT DETERMINED.

UEL: NOT DETERMINED.

FLAMMABILITY CLASSIFICATION: NFPA CLASS IIIB

EXTINGUISHING MEDIA:  
DRY CHEMICAL, CARBON DIOXIDE (CO2), WATER SPRAY, SAND OR EARTH. WATER AND FOAM MAY CAUSE FROTHING.

HAZARDOUS COMBUSTION PRODUCTS:  
CARBON MONOXIDE, CARBON DIOXIDE, SMALLER AMOUNTS OF OXIDES OF SULFUR AND NITROGEN.

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE KNOWN.

FIRE-FIGHTING INSTRUCTIONS/EQUIPMENT:  
KEEP PERSONNEL REMOVED AND UPWIND OF ANY FIRE. WEAR FULL FIRE-FIGHTING TURN-OUT GEAR (FULL BUNKER GEAR), AND RESPIRATORY PROTECTION (SCBA). WATER SPRAY MAY BE USEFUL IN MINIMIZING VAPORS AND COOLING CONTAINERS EXPOSED TO HEAT AND FLAME. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES. MOVE UNDAMAGED CONTAINERS FROM FIRE AREA IF POSSIBLE WITHOUT RISK.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

USE RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). COLLECT LEAKING LIQUID IN SEALABLE CONTAINERS. ABSORB SPILLED LIQUID IN SAND OR INERT ABSORBENT. CONTACT FIRE AUTHORITIES AND APPROPRIATE REGULATORY AGENCIES. IF SPILL OF ANY AMOUNT IS MADE INTO OR UPON U.S. NAVIGABLE WATERS, THE CONTIGUOUS ZONE, OR ADJOINING SHORELINES, NOTIFY COAST GUARD NATIONAL RESPONSE CENTER (800-424-8802).

## SECTION 7 HANDLING AND STORAGE

HANDLING PRECAUTIONS:  
USE RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS:  
STORE AWAY FROM INCOMPATIBLE CHEMICALS (SEE SEC. 10). STORE IN A COOL, DRY AREA.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION:  
USE APPROVED EYE PROTECTION TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT.

SKIN/HAND PROTECTION: USE IMPERMEABLE GLOVES, SUCH AS RUBBER GLOVES.

RESPIRATORY PROTECTION:  
IF AIRBORNE CONCENTRATION EXCEEDS RECOMMENDED EXPOSURE LIMITS, A SUITABLE FILTER-TYPE RESPIRATOR SHOULD BE WORN.

OTHER EQUIPMENT: EYE WASH AND SAFETY SHOWER.

ENGINEERING CONTROLS:  
NORMAL ROOM VENTILATION. LOCAL EXHAUST IN CONFINED AREAS.

ADMINISTRATIVE CONTROLS:  
USERS OF THIS PRODUCT MUST BE PROPERLY TRAINED AND QUALIFIED IN ITS USE.

OTHER INFORMATION:  
IT IS SUGGESTED THAT A SOURCE OF CLEAN WATER BE AVAILABLE IN THE WORK AREA FOR FLUSHING EYES AND SKIN. BARRIER CREAMS THAT ARE SPECIFIC FOR OIL-BASED MATERIALS ARE RECOMMENDED WHEN GLOVES ARE IMPRACTICAL.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: CLEAR YELLOW LIQUID.

ODOR: OIL-LIKE.

ODOR THRESHOLD (PPM): NOT DETERMINED.

SPECIFIC GRAVITY (H2O = 1): 0.88

SOLUBILITY:

-130-

WATER: INSOLUBLE  
FAT: SOLUBLE.

COEFFICIENT OF WATER/OIL SOLUBILITY: <<1

PARTITION COEFFICIENT (n-OCTANOL/WATER): >>1

pH: NOT APPLICABLE.

MELTING POINT: NOT DETERMINED.

BOILING POINT: ABOVE 600 DEG. F / 316 DEG. C

VAPOR PRESSURE (MMHg AT 20 DEG. C): NOT DETERMINED.

VAPOR DENSITY (AIR = 1): >1

EVAPORATION RATE (n-BuAc = 1): <1

V.O.C.: 0% (W/W), 0% (V/V), 0 LBS./GAL. (U.S.), 0 KG/L

FLASH POINT (METHOD): (SEE SECTION 5)

AUTOIGNITION TEMPERATURE: (SEE SECTION 5)

FLAMMABILITY CLASSIFICATION: (SEE SECTION 5)

UNUSUAL FIRE OR EXPLOSION HAZARDS: (SEE SECTION 5)

OXIDIZING PROPERTIES: NOT APPLICABLE.

OTHER INFORMATION: NONE.

#### SECTION 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE KNOWN.

CHEMICALS TO AVOID: STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS (NON-THERMAL): NOT DETERMINED.

#### SECTION 11 TOXICOLOGICAL INFORMATION

SENSITIZATION TO PRODUCT: NOT APPLICABLE.

IRRITANCY OF PRODUCT: EYE AND SKIN CONTACT, INHALATION, INGESTION.

REPRODUCTIVE TOXICITY: NOT APPLICABLE.

TERATOGENICITY: NOT APPLICABLE.

MUTAGENICITY: NOT APPLICABLE.

FURTHER HAZARD INFORMATION, IF APPLICABLE, MAY BE FOUND IN SECTION 3.  
TOXICOLOGICAL INFORMATION REGARDING INDIVIDUAL INGREDIENTS, IF APPLICABLE,  
BE FOUND IN SECTION 2.

#### SECTION 12 ECOLOGICAL INFORMATION

MOBILITY: NOT DETERMINED.

DEGRADABILITY: NOT DETERMINED.

ACCUMULATION: NOT DETERMINED.

ECOTOXICITY: NOT DETERMINED.

OTHER ADVERSE EFFECTS: NOT DETERMINED.

#### SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

#### SECTION 14 TRANSPORT INFORMATION

D.O.T. (U.S.):

PROPER SHIPPING NAME: NOT REGULATED.

HAZARD CLASS OR DIVISION: NOT REGULATED.

HAZARD LABEL: NOT REGULATED.

I.D. NUMBER: NOT REGULATED.

TDG (CANADA): NOT REGULATED.

IATA: NOT REGULATED.

ICAO: NOT REGULATED.

IMO: NOT REGULATED.

AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS:  
DANGEROUS GOODS CLASS AND SUBSIDIARY RISK: NOT DETERMINED.

#### SECTION 15 REGULATORY INFORMATION

FOOTNOTES FOR SECTION 2:

(1) SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 313.

(2) APPEARS ON THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT  
(P.L.R. 65) SUBSTANCES LIST.

(3) APPEARS ON THE MASSACHUSETTS SUBSTANCES LIST.

(4) APPEARS ON THE NEW JERSEY RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST.

(5) APPEARS ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST.

(6) APPEARS ON THE CANADIAN WHMIS INGREDIENT DISCLOSURE LIST.

U.S.A.:

OSHA HAZARD STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY THE U.S. OSHA HCS  
(29 CFR 1910.1200).

EPA SARA SEC. 311/312 HAZARD CATEGORIES:  
IMMEDIATE (ACUTE) HEALTH HAZARD.

TOXIC SUBSTANCES CONTROL ACT (TSCA):  
ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE LISTED ON THE U.S. EPA TSCA  
CHEMICAL SUBSTANCE INVENTORY.

HMIS RATING:  
HEALTH 1  
FLAMMABILITY 1  
REACTIVITY 0

NFPA RATING:  
HEALTH 0  
FLAMMABILITY 1  
REACTIVITY 0

CANADA:

WHMIS STATUS:  
THIS PRODUCT IS CONSIDERED TO BE HAZARDOUS AS DEFINED BY CANADIAN WHMIS  
CONTROLLED PRODUCTS REGULATIONS.

WHMIS RATING: D1-B

WHMIS RISK PHRASES:  
HARMFUL BY INHALATION AND IF SWALLOWED. MAY CAUSE LUNG DAMAGE IF  
SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

WHMIS PRECAUTIONARY STATEMENTS:  
KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FOOD AND DRINK. DO NOT  
BREATHE VAPOR OR SPRAY. AVOID CONTACT WITH SKIN AND EYES. IN CASE OF  
CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK  
MEDICAL ADVICE. DO NOT EMPTY INTO DRAINS. WEAR SUITABLE PROTECTIVE  
CLOTHING. IF SWALLOWED, DO NOT INDUCE VOMITING.  
SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER, LABEL OR SAFETY  
DATA SHEET.

DOMESTIC SUBSTANCES LIST (DSL):  
ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE LISTED ON THE CANADIAN EPA  
(CEPA) DOMESTIC SUBSTANCES LIST (DSL).

E.U.:

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES (EINECS):  
ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE LISTED ON THE EUROPEAN  
INVENTORY OF EXISTING CHEMICAL SUBSTANCES (EINECS).

CATEGORIES OF DANGER (LABELING INFORMATION): HARMFUL (Xn), IRRITANT (Xi)

RISK (R) PHRASES: HARMFUL BY INHALATION AND IF SWALLOWED (R20/22).

HARMFUL:  
MAY CAUSE LUNG DAMAGE IF SWALLOWED (R65). IRRITATING TO EYES, RESPIRATORY  
SYSTEM AND SKIN (R36/37/38).

SAFETY (S) PHRASES:  
KEEP OUT OF REACH OF CHILDREN (S2)  
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS (S13)  
DO NOT BREATHE VAPOR OR SPRAY (S23)  
AVOID CONTACT WITH SKIN AND EYES (S24/25)  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND  
SEEK MEDICAL ADVICE (S26)  
DO NOT EMPTY INTO DRAINS (S29)  
WEAR SUITABLE PROTECTIVE CLOTHING (S36)  
IF SWALLOWED, SEEK MEDICAL ADVICE AND SHOW THIS CONTAINER, LABEL OR SAFETY  
DATA SHEET (S46)  
IF SWALLOWED, DO NOT INDUCE VOMITING:  
SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER, LABEL OR SAFETY  
DATA SHEET (S62).

AUSTRALIA:

WORKSAFE AUSTRALIA STATUS:  
THIS PRODUCT IS CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE  
AUSTRALIA.

HAZCHEM CODE: NOT DETERMINED.

POISONS SCHEDULE NUMBER: NOT DETERMINED.

FURTHER REGULATORY INFORMATION REGARDING INDIVIDUAL INGREDIENTS, IF  
APPLICABLE, MAY BE FOUND IN SECTION 2.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA  
OF THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THE CANADIAN WHMIS  
CONTROLLED PRODUCTS REGULATIONS, THE BRITISH CIP2 REGULATION 6, AND THE  
AUSTRALIAN NMRONHS. THIS MSDS CONTAINS THE INFORMATION REQUIRED BY THE  
ABOVE REGULATIONS AND CONFORMS TO ANSI Z400.1-1993.

#### SECTION 16 OTHER INFORMATION

MSDS PREPARED BY: DIRECTOR OF CHEMICAL SAFETY

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS  
ACCURATE AND RELIABLE TO THE BEST OF OUR KNOWLEDGE AND BELIEF. HOWEVER,  
LA-CO INDUSTRIES, INC. MAKES NO REPRESENTATIONS AS TO ITS COMPLETENESS OR  
ACCURACY. INFORMATION IS SUPPLIED ON CONDITION THAT PERSONS RECEIVING SUCH  
INFORMATION WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR  
THEIR PURPOSES PRIOR TO USE. IN NO EVENT WILL LA-CO INDUSTRIES, INC. BE  
RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF  
OR RELIANCE UPON THE INFORMATION CONTAINED HEREIN.

0121665570

MATERIAL SAFETY DATA SHEET (MSDS)

6Y762

This MSDS should be attached or kept with the respective product with which it is associated.

L SAFETY DATA SHEET - A1978

Associated Grainger Items  
6Y761, 6Y762

DOW CORNING

DOW CORNING CORPORATION

MATERIAL SAFETY DATA SHEET

DOW CORNING(R) 111 VALVE LUBRICANT & SEALANT

-----1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY -----

DOW CORNING CORPORATION  
SOUTH SAGINAW ROAD  
MIDLAND, MICHIGAN 48686

24 HOUR EMERGENCY TELEPHONE: (517) 496-5900

CUSTOMER SERVICE: (517) 496-6000

PRODUCT DISPOSAL INFORMATION: (517) 496-6315

BC: (800) 424-9300

MSDS NO: 01889834

REVISION DATE: 2000/01/17

GENERIC DESCRIPTION: SILICONE GREASE

PHYSICAL FORM: GREASE

COLOR: TRANSLUCENT WHITE

ODOR: ODORLESS

NFPA PROFILE:

HEALTH: 0

FLAMMABILITY: 1

INSTABILITY/REACTIVITY: 0

NOTE: NFPA = NATIONAL FIRE PROTECTION ASSOCIATION

-----2. OSHA HAZARDOUS COMPONENTS -----

NONE PRESENT.

THIS IS NOT A HAZARDOUS MATERIAL AS DEFINED IN THE OSHA HAZARD COMMUNICATION STANDARD.

-----3. EFFECTS OF OVEREXPOSURE -----

ACUTE EFFECTS:

EYE: DIRECT CONTACT MAY CAUSE TEMPORARY REDNESS AND DISCOMFORT.

SKIN: NO SIGNIFICANT IRRITATION EXPECTED FROM A SINGLE SHORT-TERM EXPOSURE.

INHALATION: NO SIGNIFICANT EFFECTS EXPECTED FROM A SINGLE SHORT-TERM EXPOSURE.

ORAL: LOW INGESTION HAZARD IN NORMAL USE.

PROLONGED/REPEATED EXPOSURE EFFECTS:

SKIN: NO KNOWN APPLICABLE INFORMATION.

INHALATION: NO KNOWN APPLICABLE INFORMATION.

ORAL: NO KNOWN APPLICABLE INFORMATION.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NO KNOWN APPLICABLE INFORMATION.

THE ABOVE LISTED POTENTIAL EFFECTS OF OVEREXPOSURE ARE BASED ON ACTUAL DATA, RESULTS OF STUDIES PERFORMED UPON SIMILAR COMPOSITIONS, COMPONENT DATA AND/OR EXPERT REVIEW OF THE PRODUCT. PLEASE REFER TO SECTION 11 FOR THE DETAILED TOXICOLOGY INFORMATION.

-----4. FIRST AID MEASURES -----

EYE: IMMEDIATELY FLUSH WITH WATER.

SKIN: NO FIRST AID SHOULD BE NEEDED.

INHALATION: NO FIRST AID SHOULD BE NEEDED.

ORAL: NO FIRST AID SHOULD BE NEEDED.

COMMENTS: TREAT SYMPTOMATICALLY.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: > 214.0 DEG. F / > 101.1 DEG. C CLOSED CUP

AUTOIGNITION TEMPERATURE: NOT DETERMINED

FLAMMABILITY LIMITS IN AIR: NOT DETERMINED

EXTINGUISHING MEDIA:

ON LARGE FIRES USE DRY CHEMICAL, FOAM OR WATER SPRAY. ON SMALL FIRES USE CARBON DIOXIDE (CO2), DRY CHEMICAL OR WATER SPRAY. WATER CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

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FIRE FIGHTING MEASURES:

SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN IN  
FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR  
ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO  
KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE HAZARDS: NONE

HAZARDOUS DECOMPOSITION PRODUCTS:

THERMAL BREAKDOWN OF THIS PRODUCT DURING FIRE OR VERY HIGH HEAT CONDITIONS  
MAY EVOLVE THE FOLLOWING HAZARDOUS DECOMPOSITION PRODUCTS: SILICON DIOXIDE.  
CARBON OXIDES AND TRACES OF INCOMPLETELY BURNED CARBON COMPOUNDS.  
FORMALDEHYDE.

-----6. ACCIDENTAL RELEASE MEASURES -----

CONTAINMENT/CLEAN UP:

DETERMINE WHETHER TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL  
EMERGENCY PLAN. OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS  
DESCRIBED IN SECTIONS 5 AND 8. FOR LARGE SPILLS, PROVIDE DIKING OR OTHER  
APPROPRIATE CONTAINMENT TO KEEP MATERIAL FROM SPREADING. IF DIKED MATERIAL  
CAN BE PUMPED, STORE RECOVERED MATERIAL IN APPROPRIATE CONTAINER. CLEAN UP  
REMAINING MATERIALS FROM SPILL WITH SUITABLE ABSORBENT. CLEAN AREA AS  
APPROPRIATE SINCE SOME SILICONE MATERIALS, EVEN IN SMALL QUANTITIES, MAY  
PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE USE OF STEAM, SOLVENTS OR  
DETERGENTS. DISPOSE OF SATURATED ABSORBENT OR CLEANING MATERIALS  
APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR. LOCAL, STATE, AND  
FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS  
MATERIAL, AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF  
RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND  
REGULATIONS ARE APPLICABLE. SECTIONS 13 AND 15 OF THIS MSDS PROVIDE  
INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

NOTE:

SEE SECTION 8 FOR PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS. CALL DOW CORNING  
CORPORATION, (517) 496-5900, IF ADDITIONAL INFORMATION IS REQUIRED.

-----7. HANDLING AND STORAGE -----

USE WITH ADEQUATE VENTILATION. AVOID EYE CONTACT.

USE REASONABLE CARE AND STORE AWAY FROM OXIDIZING MATERIALS.

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

COMPONENT EXPOSURE LIMITS:

THERE ARE NO COMPONENTS WITH WORKPLACE EXPOSURE LIMITS.

ENGINEERING CONTROLS

LOCAL VENTILATION: NONE SHOULD BE NEEDED

GENERAL VENTILATION: RECOMMENDED

PERSONAL PROTECTIVE EQUIPMENT FOR ROUTINE HANDLING:

EYES: USE PROPER PROTECTION - SAFETY GLASSES AS A MINIMUM.

SKIN: WASHING AT MEALTIME AND END OF SHIFT IS ADEQUATE.

SUITABLE GLOVES: NO SPECIAL PROTECTION NEEDED.

INHALATION: NO RESPIRATORY PROTECTION SHOULD BE NEEDED.

SUITABLE RESPIRATOR: NONE SHOULD BE NEEDED.

PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS:

EYES: USE PROPER PROTECTION - SAFETY GLASSES AS A MINIMUM.

SKIN: WASHING AT MEALTIME AND END OF SHIFT IS ADEQUATE.

INHALATION/SUITABLE RESPIRATOR: NO RESPIRATORY PROTECTION SHOULD BE NEEDED.

PRECAUTIONARY MEASURES: AVOID EYE CONTACT. USE REASONABLE CARE.

COMMENTS: NONE

NOTE:

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED  
TEMPERATURE, OR AEROSOL/SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL FORM: GREASE

COLOR: TRANSLUCENT WHITE

ODOR: ODORLESS

SPECIFIC GRAVITY @ 25 DEG. C: 1.1

VISCOSITY: NOT APPLICABLE.

FREEZING/MELTING POINT: NOT DETERMINED.

BOILING POINT: NOT DETERMINED.

VAPOR PRESSURE @ 25 DEG. C: NOT DETERMINED.

VAPOR DENSITY: NOT DETERMINED.

SOLUBILITY IN WATER: NOT DETERMINED.

pH: NOT DETERMINED.

VOLATILE CONTENT: NOT DETERMINED.

NOTE:

THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT  
SPECIFICATIONS. CONTACT DOW CORNING BEFORE WRITING SPECIFICATIONS.

-----10. STABILITY AND REACTIVITY -----

CHEMICAL STABILITY: STABLE.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

IONS TO AVOID: NONE.

MATERIALS TO AVOID: OXIDIZING MATERIAL CAN CAUSE A REACTION.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE TOXICOLOGY DATA FOR PRODUCT:  
COMPLETE INFORMATION IS NOT YET AVAILABLE.

COMPONENT TOXICOLOGY INFORMATION:  
COMPLETE INFORMATION IS NOT YET AVAILABLE.

SPECIAL HAZARD INFORMATION ON COMPONENTS:  
NO KNOWN APPLICABLE INFORMATION.

-----12. ECOLOGICAL INFORMATION -----

ENVIRONMENTAL FATE AND DISTRIBUTION:  
NO SPECIFIC INFORMATION IS AVAILABLE.

ENVIRONMENTAL EFFECTS:  
NO SPECIFIC INFORMATION IS AVAILABLE.

END EFFECTS IN WASTE WATER TREATMENT PLANTS:  
NO SPECIFIC INFORMATION IS AVAILABLE.

ECOTOXICITY CLASSIFICATION CRITERIA:

HAZARD PARAMETERS (LC50 OR EC50)	HIGH	MEDIUM	LOW
ACUTE AQUATIC TOXICITY (MG/L)	< =1	> 1 AND < =100	> 100
ACUTE TERRESTRIAL TOXICITY	< =100	> 100 AND < =2000	>2000

THIS TABLE IS ADAPTED FROM "ENVIRONMENTAL TOXICOLOGY AND RISK ASSESSMENT",  
ASTM STP 1179, P.34, 1993.

THIS TABLE CAN BE USED TO CLASSIFY THE ECOTOXICITY OF THIS PRODUCT WHEN  
ECOTOXICITY DATA IS LISTED ABOVE. PLEASE READ THE OTHER INFORMATION  
PRESENTED IN THE SECTION CONCERNING THE OVERALL ECOLOGICAL SAFETY OF THIS  
MATERIAL.

-----13. DISPOSAL CONSIDERATIONS -----

RCRA HAZARD CLASS (40 CFR 261):

WHEN A DECISION IS MADE TO DISCARD THIS MATERIAL, AS  
REMOVED, IS IT CLASSIFIED AS A HAZARDOUS WASTE? NO

STATE OR LOCAL LAWS MAY IMPOSE ADDITIONAL  
REGULATORY REQUIREMENTS REGARDING DISPOSAL.

CALL DOW CORNING CORPORATE ENVIRONMENTAL MANAGEMENT

(517)496-6315, IF ADDITIONAL INFORMATION IS REQUIRED.

-----14. TRANSPORT INFORMATION -----

DOT ROAD SHIPMENT INFORMATION (49CFR 172.101): NOT SUBJECT TO DOT.

OCEAN SHIPMENT (IMDG): NOT SUBJECT TO IMDG CODE.

AIR SHIPMENT (ICAO): NOT SUBJECT TO ICAO REGULATIONS.

CALL DOW CORNING TRANSPORTATION:  
(517)496-8577, IF ADDITIONAL INFORMATION IS REQUIRED.

-----15. REGULATORY INFORMATION -----

CONTENTS OF THIS MSDS COMPLY WITH THE OSHA  
HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

TSCA STATUS:  
ALL CHEMICAL SUBSTANCES IN THIS MATERIAL ARE INCLUDED ON OR EXEMPTED FROM  
LISTING ON THE TSCA INVENTORY OF CHEMICAL SUBSTANCES.

EPA SARA TITLE III CHEMICAL LISTINGS:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: NONE

SECTION 304 CERCLA HAZARDOUS SUBSTANCES: NONE

SECTION 312 HAZARD CLASS:

ACUTE: NO  
CHRONIC: NO  
FIRE: NO  
PRESSURE: NO  
REACTIVE: NO

SECTION 313 TOXIC CHEMICALS:  
NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

SUPPLEMENTAL STATE COMPLIANCE INFORMATION:

CALIFORNIA:

WARNING:  
THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF  
CALIFORNIA UNDER THE SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986  
(PROPOSITION 65) AS BEING KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER  
REPRODUCTIVE HARM.

NONE KNOWN.

MASSACHUSETTS:

CAS NUMBER	WT %	COMPONENT NAME
7631-86-9	7.0-13.0	SILICA, AMORPHOUS

NEW JERSEY:

CAS NUMBER	WT %	COMPONENT NAME
------------	------	----------------

63148-62-9	> 60.0	POLYDIMETHYLSILOXANE
7631-86-9	7.0-13.0	SILICA, AMORPHOUS FUMED
70131-67-8	7.0-13.0	DIMETHYL SILOXANE, HYDROXY-TERMINATED

AVANIA:

CAS NUMBER	WT %	COMPONENT NAME
63148-62-9	> 60.0	POLYDIMETHYLSILOXANE
7631-86-9	7.0-13.0	SILICA
70131-67-8	7.0-13.0	DIMETHYL SILOXANE, HYDROXY-TERMINATED

-----16. OTHER INFORMATION -----

PREPARED BY: DOW CORNING CORPORATION

THESE DATA ARE OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATIONS. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

(R) INDICATES REGISTERED TRADEMARK

## ITEM: 1WG50 - OIL COMPRESSOR

PICK REQ: 1110736861

## MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A2431

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A2431

Associated Grainger Item: 1WG50 - OIL COMPRESSOR

SPEEDAIRE (R\*)

MATERIAL SAFETY DATA SHEET

FORM EN-81, 1ST EDITION

DATE: OCTOBER 2001

H.M.I.S.

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

THESE RATINGS SHOULD BE USED ONLY AS A PART OF A FULLY IMPLEMENTED H.M.I.S. PROGRAM.

## SECTION I PRODUCT IDENTIFICATION

TRADE NAME AND SYNONYMS: SPEEDAIRE RECIP LUBRICANT  
MINERAL OIL

PART NUMBERS: 1WG50

MANUFACTURER'S NAME: SPEEDAIRE  
ADDRESS: 1301 NORTH EUCLID AVENUE  
PRINCETON, IL 61356HEALTH EMERGENCY PHONE NUMBER: (217) 222-5400  
SAFETY DEPARTMENT

PRODUCT IDENTIFICATION:

HYDROCARBON RECIPROCATING COMPRESSOR OIL

CHEMICAL NAMES AND SYNONYMS:  
PETROLEUM HYDROCARBON

## SECTION II TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE: AMBER TO LIGHT LIQUID

% VOL BY VOL: NIL

BOILING POINT: &gt; 300 DEG. F

SOLUBLE IN WATER: NEGLIGIBLY

FREEZING POINT: ND

V. DENSITY: &gt; AIR

SPECIFIC GRAVITY: 0.88 (APPROX.)

EVAPORATION RATE: NA

\*\* VAPOR DENSITY OF AIR IS = 1 \*\*

\*\* EVAPORATION RATE OF BUTYL ACETATE IS = 1 \*\*

## SECTION III COMPOSITION/INFORMATION OF INGREDIENTS

COMPOSITION	CAS #	%	PEL
P: INDUSTRIAL OIL	MIXTURE	100	5 MG/CUM
1: SOLV. REF. HVY. PARAFFIN OIL	64742-54-7		5 MG/CUM
2: LT. NAPTH. HYDROTREATED DIST.	64742-53-6		5 MG/CUM
3: HVY. NAPTH. HYDROTREATED DIST.	64742-67-7		5 MG/CUM
4: DEASPHALTED RESIDIUM	64742-95-3		5 MG/CUM
5: SOL. REF. SAT. PARAFFIN DIST.	64742-65-0		5 MG/CUM (AS MIST)

## SECTION IV HMIS HAZARD RATING

LEAST	0
SLIGHT	1
MODERATE	2
HIGH	3
EXTREME	4

HEALTH:	1
FIRE:	1
REACTIVITY:	0
OTHER:	0
PERSONAL PROTECTION:	B

## SECTION V HAZARDS IDENTIFICATION

HEALTH:	NO
ENVIRONMENTAL HEALTH:	NO
REACTIVITY:	NO
FIRE:	NO

\*\* SEE SECTION XII FOR COMPLETE HEALTH HAZARD INFORMATION \*\*

## SECTION VI EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:  
AS WITH MOST FOREIGN MATERIALS, IF EYE CONTACT SHOULD OCCUR, FLUSH EYES WITH PLENTY OF WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.SKIN CONTACT:  
WASH EXPOSED SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.INHALATION:  
REMOVE EXPOSED PERSON TO FRESH AIR IF ADVERSE EFFECTS ARE OBSERVED.INGESTION:  
DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

## SECTION VII FIRE FIGHTING MEASURES

FLASH POINT:  
257 DEG. C 500 DEG. FFLAMMABLE LIMITS:  
UPPER: NE  
LOWER: NEAUTO IGNITION (FIRE POINT):  
> 680 DEG. FEXTINGUISHING MEDIA:  
USE WATER FOG, FOAM, DRY CHEMICAL OF CO2. DO NOT USE A DIRECT STREAM OF WATER. MATERIAL WILL FLOAT ON WATER SURFACE AND CAN RE-IGNITE ON THE SURFACE OF THE WATER.SPECIAL FIRE FIGHTING PROCEDURES:  
DO NOT ENTER CONFINED FIRE-SPACE WITHOUT FULL BUNKER GEAR, INCLUDING POSITIVE PRESSURE SCBA. COOL FIRE EXPOSED CONTAINERS WITH WATER.UNUSUAL FIRE AND EXPLOSION HAZARDS:  
NONE

## SECTION VIII REACTIVITY DATA

STABILITY:  
STABLECONDITIONS AND MATERIAL TO AVOID:  
AVOID HEAT, OPEN FLAMES AND STRONG OXIDIZERS.HAZARDOUS DECOMPOSITION PRODUCTS:  
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION PROCESS. BY-PRODUCTS OF COMBUSTION MAY INCLUDE: OXIDES OF CARBON, BORON, NITROGEN, SULFUR, PHOSPHORUS, ZINC, CALCIUM, AND/OR MAGNESIUM.HAZARDOUS POLYMERIZATION:  
WILL NOT OCCUR.

## SECTION XI SPILL OR LEAK PROCEDURE

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:  
REMOVE ALL SOURCES OF IGNITION. SMALL SPILLS MAY BE ABSORBED WITH INERT MATERIAL AS SAND, CLAY, VERMICULITE, ETC. LARGE SPILLS SHOULD BE DIKED TO PREVENT ENTRY TO SEWERS OR WATERWAYS. LARGE SPILLS MAY BE PICKED UP WITH A VACUUM TRUCK, SHOVELS, OR OTHER APPROPRIATE MEANS AND PLACED IN SALVAGE DRUMS OR OTHER SUITABLE CONTAINERS.

## SECTION X SPECIAL PROTECTION INFORMATION

EYE PROTECTION:  
CHEMICAL GOGGLES.SKIN PROTECTION:  
LONG SLEEVE SHIRT IS RECOMMENDED. NITRILE GLOVES.RESPIRATORY PROTECTION:  
IF THE RECOMMENDED EXPOSURE LIMIT IS EXCEEDED, USE RESPIRATOR WITH ORGANIC VAPOR & DUST/MIST CARTRIDGES.VENTILATION:  
SUFFICIENT MECHANICAL (GENERAL) AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN EXPOSURE BELOW PEL.

## SECTION XI SPECIAL PRECAUTIONS

HANDLING:  
KEEP CONTAINERS CLOSED WHEN NOT IN USE. EMPTY CONTAINER CONTAINS PRODUCT RESIDUE AND MAY EXHIBIT HAZARDS OF PRODUCT.STORAGE:  
STORE IN A COOL, DRY, WELL-VENTILATED AREA.

## SECTION XII TOXICOLOGICAL DATA

INGESTION:  
LD 50 IN RATS > 5000 MG/KG; PRACTICALLY NON-TOXIC.INHALATION:  
OIL MIST MAY CAUSE RESPIRATORY IRRITATION.EYE IRRITATION:  
MILD EYE IRRITANT.SKIN IRRITATION:  
NOT EXPECTED TO BE A PRIMARY SKIN IRRITANT.

CARCINOGENICITY:  
NOT A KNOWN CARCINOGEN.

SECTION XIII ECOLOGICAL INFORMATION

FRESHWATER FISH TOXICITY: TEST PROGRAM IS IN PROGRESS.  
WATER INVERTEBRATES TOXICITY: TEST PROGRAM IS IN PROGRESS.  
WATER FISH TOXICITY: NE  
SAWATER INVERTEBRATES TOXICITY: NE  
BACTERIAL TOXICITY: TEST PROGRAM IS IN PROGRESS.  
MISCELLANEOUS TOXICITY: NE  
MISCELLANEOUS ENVIRONMENTAL FATE: TEST PROGRAM FOR BIODEGRADATION  
IS IN PROGRESS.

SECTION XIV DISPOSAL CONSIDERATIONS

DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

SECTION XV TRANSPORTATION INFORMATION

DOT CLASSIFICATION: NON-HAZARDOUS.  
PROPER SHIPPING NAME: NA

SECTION XVI REGULATORY INFORMATION

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY OF CHEMICAL SUBSTANCES.

SECTION XVII OTHER INFORMATION

ALWAYS WASH HANDS AND FACE BEFORE EATING, DRINKING, OR SMOKING.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SPEEDAIRE MAKES NO WARRANTY EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SPEEDAIRE ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

NOTE:  
NOT A CONTROLLED PRODUCT UNDER CANADIAN WHMIS HAZARD CRITERIA; AS SPECIFIED IN CONTROLLED PRODUCT REGULATION.

PREPARED BY THE PRODUCT SPECIALIST, AFTERMARKET  
OCTOBER 2001